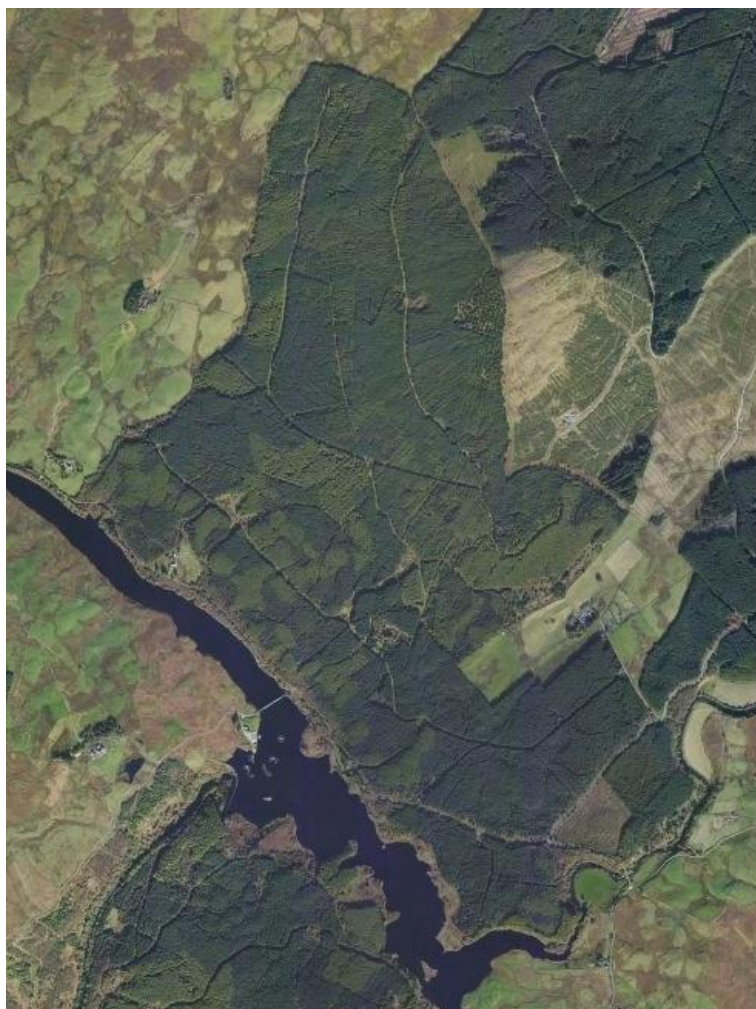


**Carsphairn Community Woodland Ltd**

**Muirdrochwood Business Plan**

**6 November 2018**



**Carsphairn Community Woodland Limited is committed to acquiring, developing and managing local woodlands in a sustainable and environmentally sound way for the long-term benefit of the local community.**

**Jon Hollingdale, Community Woodlands Association  
For Carsphairn Community Trust**  
A Scottish Charitable Incorporated Organisation SCO44308



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## I Summary

Carsphairn Community Woodland Ltd (CCW) is a community organisation which aims to acquire and develop woodland around Carsphairn to create a facility for the long-term benefit which is sustainable, enhances the natural environment, is innovative and provides opportunities for employment, recreation, education and training for those in the local community and beyond, whilst providing an attractive tourist offering and contributing to the economic regeneration of the area.

Carsphairn Community Woodland is considering the acquisition of Muirdrochwood from Scottish Ministers. The forest is in four blocks, separated by public roads, with a total area of ~324ha, and is managed by Forest Enterprise Scotland for Scottish Ministers.

This plan is intended to fulfil several functions:

- It lays out the community's plans for future forest management and other development projects.
- It supports the community's asset transfer request
- It supports CCW's fundraising for the costs of acquisition and subsequent management and development of Muirdrochwood.

Muirdrochwood is a potentially valuable local asset with good road access and an attractive lochside setting. FES management to date has focused on timber production objectives with limited local economic benefit or delivery of social and environmental outcomes.

CCW wish to acquire Muirdrochwood to create a rural economic hub which will contribute to the regeneration of the community and to deliver a broad range of economic, social and environmental benefits.

The plan describes the woodland and the background to community involvement, details the community's plans and aspirations for the site, provides a 25 year cashflow and detailed income and expenditure projections for forest management and development projects to be taken forward in the first five years of community ownership, as well as outlining a range of potential future developments.

The initial stages of project development were undertaken by Carsphairn Community Trust. As part of the process a new community body, Carsphairn Community Woodland (CCW), eligible to use the asset transfer provisions and seek funding from the Scottish Land Fund has been established. After acquisition CCW will finalise forest management proposals and seek approval from Forestry Commission Scotland<sup>1</sup> (FCS) for a Long Term Forest Plan.

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<sup>1</sup> It is likely that by the time the acquisition is complete the functions of Forestry Commission Scotland will have been taken on by a new agency, Scottish Forestry, for clarity this plan refers to FCS throughout.

## **2 Benefits of Community Ownership**

CCW wish to acquire Muirdrochwood to create a rural economic hub which will contribute to the regeneration of the community and to deliver a broad range of economic, social and environmental benefits. Community ownership provides the opportunity to unlock the potential of the site, creating new business and employment opportunities to facilitate rural regeneration and help build a more resilient community.

The economic benefits of future timber harvesting will be retained and reinvested in the management and development of the forest whilst an outdoor education centre will create jobs and income and raise the profile of the area. Longer term projects such as affordable housing and tourist accommodation will continue to increase the value of the forest to the community and the local economy.

Acquiring the forest is a long term investment in the future health and well-being of the community: the increased energy and activity will make Carsphairn a more attractive place to live, especially for younger families and will enable the community to be in a position to take advantage of future as-yet-unforeseen opportunities.

### ***Economic***

Community ownership and implementation of this plan will:

- directly create 12 jobs (=8.5 FTE) by year 4, all but one of which will be funded by earned income;
- support additional employment opportunities by creating new contractor opportunities through construction of the outdoor education centre and forest management projects (paths, sawmilling etc) whilst maintaining existing contractor roles in timber harvesting and haulage;
- provide woodfuel and other products for local markets;
- stimulate additional trade for local tourist and retail businesses.

### ***Social***

Community ownership and implementation of this plan will:

- develop new recreation facilities for walkers, mountain bikers, etc and contribute towards linking long distance routes;
- provide a range of outdoor activities available to the local community and visitors;
- create opportunities for volunteering, and space for community activities and events;
- deliver a range of skills training and social rehabilitation opportunities;
- increase community cohesion and resilience through the management of the forest and its resources.

### ***Environmental***

Community ownership and implementation of this plan will:

- enhance the environmental (and amenity) value of forest through greater use of broadleaves and open space in restocking;
- increase (through education, interpretation etc) public awareness of biodiversity;
- enable more site-sensitive management policies and practices for priority species such as red squirrel and raptors;
- establish a local woodfuel supply allowing substitution of fossil fuels and reducing timber miles for low grade material.

## **2.1 CCW Objectives**

Key objectives are:

- To create local employment opportunities
- To create local economic benefit from the forest
- To improve the amenity and environmental value of the forest
- To deliver products and services to the local community
- To create opportunities for activities that support community cohesion, health and well-being

## **2.2 Main projects**

CCW will deliver the above objectives through a number of projects:

- Forest management: harvesting the existing Sitka spruce crop over the next 30 years to provide regular income from timber sales and material for woodfuel and wood products businesses. A sensitive and realistic restocking plan will significantly improve the environmental (and amenity) value of the forest by increasing species diversity, moving from Sitka monoculture to a mix of productive conifers and broadleaves.
- Recreation infrastructure: creating facilities to encourage community access and welcome visitors to Muirdrochwood, including a carpark, toilet facilities and new paths to link up the existing forest road network, give access to the loch and the river frontage.
- Community involvement: developing facilities and acquiring equipment to provide opportunities for community involvement through volunteering, skills training.
- Woodfuel and wood products: developing a range of products from the forest, including woodfuel for local markets. This will provide employment, income and contribute to tackling climate change.
- Establishing an Outdoor Education Centre: providing a unique and all-encompassing experience allowing young people to gain key and core skills in regards to teamwork, environmental stewardship, technical skills, personal growth, problem solving and skilled focused learning through a residential experience which provides an education without walls.

Longer term projects include the provision of tourist accommodation and affordable housing.

## **2.3 Key outputs**

Implementation of this plan will deliver a number of key outputs:

- Creation of 12 posts equating to 8.5 FTE jobs by year 4
- Creation of approximately 3,000m of new trails, creating a linked network covering 10km and contributing linkage to other long distance paths
- Development of community volunteering infrastructure and delivery of at least 100 volunteer days per annum by year 5
- Development of an Outdoor Education Centre welcoming 800 customers annually by year 5
- Sale of 400m<sup>3</sup> of woodfuel annually for local markets (equivalent to 236t CO<sub>2</sub> savings annually if substituting for domestic heating oil)
- Restocking of 80ha including 16.5ha of broadleaves

## 3 Muirdrochwood

### 3.1 Ownership and Management

Muirdrochwood<sup>2</sup> lies within Forest Enterprise Scotland's Galloway Forest District, based in Newton Stewart. It is part of the Castlemaddy forest design plan area, which consists of four separate blocks totalling 2,876 hectares. The main block (2,144 hectares) is situated to the west of the A713; Carminnows, a small block of 125 hectares, is situated to the east of the A713; Muirdrochwood (324 hectares) is the most easterly part of the design plan area, and the Island block (283 hectares) is situated on the prominent Dundeugh Hill, which lies to the south between Carminnows and Marscalloch.

The Castlemaddy Forest Design Plan was produced in 2012 and covers the period 2013-2022. The Muirdrochwood block was identified for disposal as part of what is now known as the New Woodland Investment Programme<sup>3</sup>; the local community (and other stakeholders) were formally notified of the intention to dispose of the property in October 2016.

The main block of Muirdrochwood is bordered to the south-east and south by the B729 (and a small area of private land around Marscalloch Cottage), to the north-west and north by open grazing land, and to the east by private woodland (much of which has been recently clearfelled) and farmland.

There are three smaller blocks, two of 20ha and 16ha which are bisected by the B7000, lie to the south of the B729 and are bordered to the south by the Kendoon Loch and the Water of Ken; and a small isolated block of ~3.6ha to the east.

#### 3.1.1 Geology, soils & landform

The Forest Design Plan records the following information on geology and soils:

*The design plan area lies to the east of Loch Doon granite intrusion with the boundary running along the metamorphic hills forming the Rhinns of Kells. The majority of the area comprises dark blue-grey shales or coarse sandstones of Ordovician period. Analysis of recent Ecological Site Classification (ESC) maps shows that Peaty gleys and surface water gleys cover 54% of the design plan area and are by far the most prominent soil types. Brown earths cover 17%, flushed and unflushed peat bogs 13%, and Iron pan and skeletal soils make up the remaining area of 16%. The Macaulay land capability for forestry classification for this area is a mixture of F5 (limited flexibility for growth & management of tree crops) on the valley floor and lower slope rising to F6 (land with very limited flexibility for growth and management of tree crops) on the higher slopes. A small area of F4 (land with moderate flexibility for growth & management of tree crops) exists along the lower slopes of Marscalloch.*

This information is reflected in the greatly differing growth rates apparent across the forest, with higher yield classes found on lower, moderately sloped ground. Smaller, peaty areas with poor drainage and growth are found throughout the wood. Future restocking plans will concentrate commercially productive species on the most appropriate sites.

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<sup>2</sup> FES refer to the wood as Marscalloch

<sup>3</sup> <http://scotland.forestry.gov.uk/managing/work-on-scotlands-national-forest-estate/land-and-building-sales/new-woodland-investment-programme>

The area which is the subject of this plan covers most of the western and southern faces of the Marscalloch Hill, rising from ~155m above sea level on the shores of Kendoon Loch to 381m at the summit of the hill. The aspect is generally south-westerly, with great views to the Rhinns of Kells, although some areas at the eastern edge of the forest look south-easterly.

Muirdrochwood lies on the eastern shore of Kendoon Loch, although for the most part there is a small buffer zone between the FES woodland and the loch, and the property itself only meets the loch at the southern edge of the wood. Nonetheless ensuring that forest and other operations contribute positively to water quality will be a significant consideration for future management.

### **3.1.2 Climate**

South West Scotland has a predominately mild windy oceanic climate influenced by the Gulf Stream. Precipitation for the area ranges from 1400mm in the relatively sheltered Glenkens to 2000mm on hill summits<sup>4</sup>.

The expected impact of climate change is that the climate will remain wet and mild, but with an increased frequency of extreme weather events. This is unlikely to affect species choice, however more frequent gales may constrain silvicultural options and the creation and maintenance of habitat networks will be important to help mitigate climate change impacts on other species.

### **3.1.3 Fauna**

Red squirrels are present in the wood, and Castlemaddy was identified as a refuge area by the “Red Squirrels in South Scotland” project in their 2005 report. Future management of the forest will seek to enhance internal habitats for red squirrels through increasing the area of Norway spruce, Scots pine and small seeded broadleaves.

The forest design plan records that both red and roe deer are present in the Castlemaddy FDP area. The Forest District reports that the roe deer cull for Muirdrochwood is set for around 10 animals, but that recent annual roe deer culls have been 3 (2016-7) and 5 (2017-8). Opportunities have been limited due to the stage of the crop and the lack of open spaces; it is acknowledged that now that felling has commenced there will be a need for significant deer control prior to restocking.

There are records of otter in Kendoon Loch and as a consequence the need for riparian and aquatic buffer zones is particularly important. Exclusion zones would be required around any identified otter breeding and/or resting places.

The forest design plan records that an osprey nest was observed within the Castlemaddy unit; osprey activity was recorded in 2011 and they have been observed regularly by many in the community. Likewise red kite are seen regularly in the vicinity. Goshawk activity has been recorded on site but information from FES suggests that there are currently no goshawks present. Appropriate pre-harvest monitoring will be carried out for raptors and timing of forest operations adjusted if necessary.

### **3.1.4 Flora**

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<sup>4</sup> Information from FES Forest Design Plan



Marscalloch contains mostly second rotation conifer crops planted in the 1980s and early 1990s with some small areas of first rotation 1940's crop retained; these are discussed in more detail in a later section of the plan.

There are some fragments of Ancient Semi-Natural Woodland (ASNW), these will be retained and where feasible allowed to expand. Future restocking plans will include a greater proportion of native trees and shrub species.

There are very limited areas of non-woodland habitat, chiefly occupied by heather, with rushes and bracken in wetter and better areas of soil respectively. Future restocking plans will incorporate a significantly increased area of open ground to meet the UK Forest Standard.

### **3.1.5 Designations**

There are no statutory environmental designations on or adjacent to the site<sup>5</sup>.

The High Bridge of Ken (adjacent to the southern edge of the site) is a category B listed building<sup>6</sup>

Canmore, the national record of the historical environment, records three sites within the main block at Muirdrochwood:

- Old farmstead at NX 6113 9109<sup>7</sup>
- Field systems at NX 6096 9139<sup>8</sup>
- and NX 6055 9145<sup>9</sup>

And a further three in the eastern block

- Building at Bell's Craig at NX 6212 9044<sup>10</sup>
- and at 6199 9028<sup>11</sup>
- Corn drying kiln at NX 6207 9038<sup>12</sup>

Future forest management and other operations will be designed to ensure that no damage is done to recorded sites or their surroundings.

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<sup>5</sup> This was checked using the Land Information Search on the FCS website and the map search facility on the SNH website.

<sup>6</sup> "Earlier 18th century bridge, possibly of earlier origin spanning Water of Ken at narrow ravine on Dalry/Carsphairn parish borders. 2 semi-circular arches separated by wide spandrel, long abutments, narrow carriageway. Arch to N spans main flow of river; subsidiary flood arch to S; both approximately 24 ft spans. Squared granite springers rise from natural rocky outcrops, squared voussoirs, rubble spandrel, soffits, abutments and parapet, latter with dressed granite coping." <http://portal.historicenvironment.scot/designation/LB3627>

<sup>7</sup> <https://canmore.org.uk/site/177456/muirdrochwood>

<sup>8</sup> <https://canmore.org.uk/site/177465/marscalloch>

<sup>9</sup> <https://canmore.org.uk/site/177467/marscalloch>

<sup>10</sup> <https://canmore.org.uk/site/177461/bells-craig-high-bridge-of-ken>

<sup>11</sup> <https://canmore.org.uk/site/177462/bells-craig-high-bridge-of-ken>

<sup>12</sup> <https://canmore.org.uk/site/177468/high-bridge-of-ken>

## 3.2 The Forest

### 3.2.1 Species

Until 2018 Muirdochwood was well-stocked: the FES subcompartment database indicates that 95% of the woodland area is tree-covered. The FES stock map is supplied separately as **Muirdochwood Map 1: FES stock map 2017**. However, species diversity is very limited – approx.  $\frac{3}{4}$  of the woodland comprises Sitka spruce, the majority of the remainder is Japanese and Hybrid larch. Most stands are monocultures.

Species	Area in ha	% of total	% of stocked area
Sitka spruce	233.20	72%	76%
Japanese larch	39.10	12%	13%
Hybrid larch	15.22	5%	5%
Mixed broadleaves	11.15	3%	4%
Birch	8.08	2%	3%
Sycamore	0.52	0%	0%
Open, etc.	16.68	5%	
<b>Total</b>	<b>323.95</b>		

**Table 1: Muirdochwood by species**

The discovery in 2017 of *Phytophthora ramorum*, led to FES to initiate a very significant felling operation – further details in section 3.2.9 below.

Future restocking plans under FES management are unclear. The current forest design plan proposes very limited changes in species composition across the design plan area; however more recent restocking plans produced by FES to accompany *Phytophthora* felling plans proposed a very significant shift to Norway spruce and Douglas fir – further details in section 5.4.2 below.

### 3.2.2 Age

Planting year	Area in ha	% of total	% of stocked area
1930	0.52	0.2%	0.2%
1948	0.87	0.3%	0.3%
1950	1.39	0.4%	0.5%
1952	0.46	0.1%	0.1%
1984	7.02	2.2%	2.3%
1985	19.00	5.9%	6.2%
1986	22.48	6.9%	7.3%
1987	34.27	10.6%	11.2%
1988	28.2	8.7%	9.2%
1989	3.36	1.0%	1.1%
1990	60.03	18.5%	19.5%
1992	112.12	34.6%	36.5%
1993	12.91	4.0%	4.2%
2007	4.64	1.4%	1.5%
Open	16.68	5.1%	
<b>Total</b>	<b>323.95</b>		

**Table 2: Muirdochwood by planting year**

Muirdrochwood is mostly comprised of second rotation crops planted between 1983 and 1993, with small remnants of first rotation stands and one area which was felled in 2007 and apparently left to regenerate naturally.

Although there is very limited structural diversity within the woodland, generally speaking the lower stands are older than those higher on the hill, and differential growth rates mean that there is considerable perceptual difference in growth stage.

### 3.2.3 Yield Class<sup>13</sup>

Yield Class	Area in ha	% of total	% of stocked area
24	13.39	4%	4%
22	31.71	10%	10%
20	7.02	2%	2%
18	0	0%	0%
16	5.49	2%	2%
14	150.44	46%	49%
12	21.38	7%	7%
10	46.38	14%	15%
8	1.01	0%	0%
6	8.22	3%	3%
4	7.64	2%	2%
2	14.59	5%	5%
Open	16.68		
<b>Total</b>	<b>323.95</b>	<b>100%</b>	<b>100%</b>

**Table 3: Muirdrochwood by yield class**

The subcompartment database suggests that just over 50ha of spruce is in yield classes 20-24, with the great majority (150ha) at yield class 14.

A full inventory has not been carried out but initial investigations suggested that there was very considerable variation within the area identified as YC 14. Growth rates in some stands at the top of the hill are undoubtedly lower than recorded; whilst those in stands lower down the hill appear better than YC 14. The majority of the latter are being felled by FES in 2018 whilst the poorer stands will remain. There is also greater diversity of growth rates within stands than the subcompartment database suggests, as some compartments contain waterlogged, peaty areas with poor growth rates.

FES have committed to provide harvesting data for the 2018 operations, which will help to clarify growth rates.

### 3.2.4 Volume

<sup>13</sup> Yield class is an index of the potential productivity of even-aged stands of trees. It is based on the maximum mean annual increment of cumulative timber volume achieved by a given tree species growing on a given site. It is measured in units of cubic metres per hectare per year (m<sup>3</sup>/ha/year) and conventionally expressed in increments of 2. The range of values found in GB is from 2 to 30.

Based on the figures in the FES sub-compartment database, and initial inspection, estimates of the standing volume in the forest prior to the 2018 harvesting operations are as follows. Note that this estimate has a considerable margin of error, and that the standing volume is never fully recovered at harvest.

Species	Standing Volume (m3)	Standing Volume (m3)
Sitka spruce	49,000	40,000
Larch	11,500	1,500
Broadleaves	500	500
Total	61,000	42,000

**Table 4: Estimated standing volume before and after 2018 harvest if stands below B729 are not harvested**

### 3.2.5 Quality

Tree form in Sitka stands seems generally good – as expected it is better in stands with higher growth rates. A brief inspection revealed very little windblow in spruce, even in stands that had been thinned.

Tree form in larch stands was (with a few exceptions) not so good, and there was significant windblow apparent in sub-cpts 7787b and 7790b.

### 3.2.6 Notable stands and features

Five “special features” of the forest - key sites or attributes worthy of particular note – were identified. Of these three: the loch frontage, the river frontage & meadow, and the mature larch stand are within the smaller areas at the southern end of the forest. The other two: the quarry (valuable both as a source of roading stone and as a potential events space / climbing wall) and the site of the farmstead, are within the main forest block.

- i) Mature larch stand. Sub-cpt 7800e comprises a mature, well thinned larch stand, adjacent to the Water of Ken and the Kendoon Loch, with very high amenity value. This stand is now showing signs of *Phytophthora ramorum* infection and will require felling, producing large diameter logs.
- ii) Loch frontage. The direct access to the Kendoon Loch from Cpt 7800 is a significant asset for the potential future development of outdoor and educational activities as well as adding significantly to the amenity value of the site.
- iii) The meadow by the river. Sub-cpt 7799c comprises ~4.5 ha of largely open land with scattered broadleaves and spruce adjacent to the River of Ken. It has very little forestry value but would be a significant asset as a potential site for development of tourist accommodation.
- iv) The old farmstead. This is sited within sub-cpt 7796c and comprises an attractive, partially open area with the ruins of a farmstead and some old broadleaves. There may be potential for sensitive development of this area for e.g. amenity / recreation.
- v) The quarry. The quarry, high on the hill in sub-cpt 7793a is a valuable asset both as a source of stone for road building and maintenance, and potentially as a recreational site.

### 3.2.7 Access and Roding

There are limited vehicle access points to the wood:

- The main forest road access to the large forest block is at NX621907. This access also serves the small-holdings and associated buildings at Muirdrochwood
- There is an unused access point (Landrover track) by Marscalloch cottage at NX604914
- The block to the west of the B7000 has a well-made, gated timber access at NX614903
- The block to the east of the B7000 has a ~50m access and loading area at NX618905
- There is evidence of ATV access to this block at NX619902 by the High Bridge of Ken
- A rough farm access track crosses the NW corner of the isolated small, eastern block, joining the road at NX622909

Pedestrian access is possible from public roads (there is limited fencing) but there are no designated places for parking.

The main forest block is well-roaded, with several routes radiating from the main entrance at the south eastern corner of the forest. One section is new, having been built to facilitate the 2018 harvesting operations. The roads are well maintained at time of writing, although timber extraction work is in progress and FES will need to ensure that adequate repairs are made post harvesting.

The roads are all dead-ends, with no circular routes available for pedestrians and cyclists, however this could be easily rectified with some new, relatively short sections of trail.

There is no formal recreation provision within the forest, although the construction of a hardstanding in Cpt 7800 has provided an informal car parking area. There is evidence of very limited pedestrian use within this block (anglers accessing the loch?) but none elsewhere in the forest.

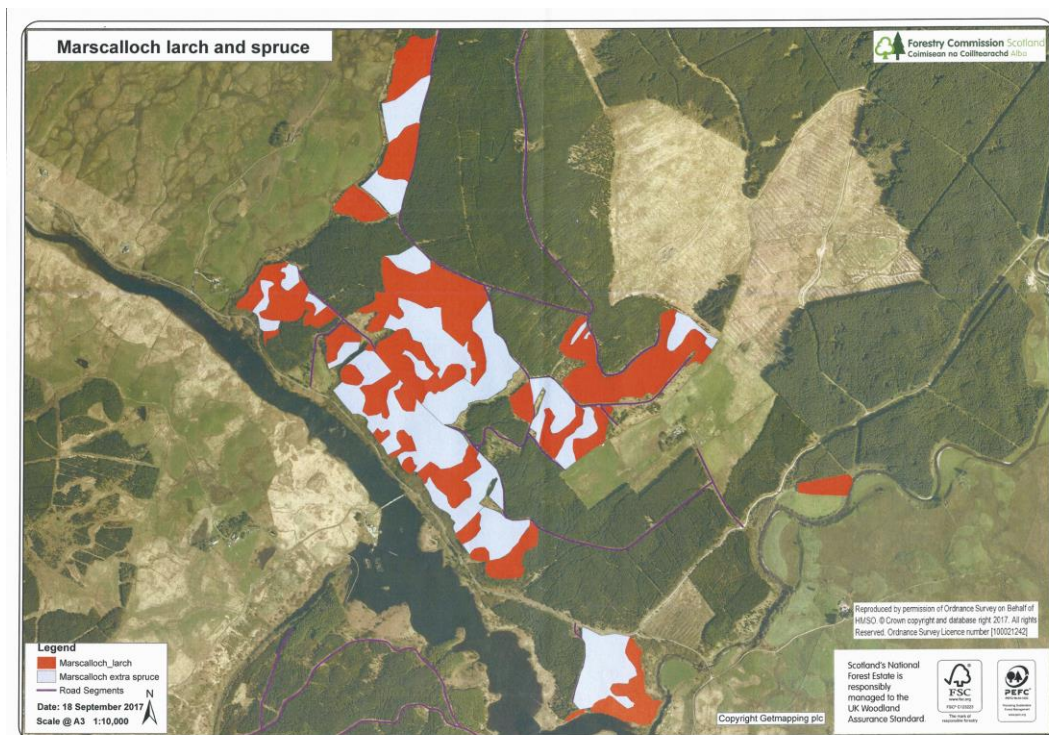
### **3.2.8 Recent Management**

A thinning operation was carried out across part of the site in 2016, the intensity and regime varying somewhat between stands. FES reported that the contract quantity for the thinning was 12,247 tonnes, but only 7,101 tonnes was actually felled. The difference was due to areas of poor/checked crop which were not viable to thin or areas of soft/wet ground which the machines could not access. Unfortunately FES have been unable to provide a detailed map showing the areas actually thinned.

### **3.2.9 *Phytophthora ramorum***

In September 2017 FES advised CCT that *Phytophthora ramorum* infection had been recorded in some of the larch stands in the forest. FES's opinion was that the best course of action was to fell all the larch in the forest, and that this would require the felling of significant areas of spruce for access and to limit windblow. FES have proposed the felling of 53ha of larch (this would be most, but not all of the ~54ha of larch in the forest) and an additional ~43 ha of Sitka spruce to facilitate access and reduce future windblow risk.

The discovery of *P ramorum* and the subsequent extensive felling has had significant effects on the community acquisition, both in terms of causing delay and because the removal of so much of the standing crop, particularly the (uninfected) spruce, constrains CCW's future options for and cashflow from harvesting and brings a large and unfunded restock obligation. Nonetheless the community felt strongly that they should continue to pursue the acquisition of the whole forest as this presents the greatest potential for long term economic regeneration and development.



**Map 2: FES proposed felling of spruce and larch**

At the community's request, FES have agreed to defer felling in the areas south of the B729. At time of writing (November 2018) felling operations are underway: it has not been possible yet to ascertain the areas felled or the timber volumes extracted.

### 3.3 Carsphairn

Muirdrochwood is ~ 4km ESE of the village of Carsphairn, along the B729, and is at the south-eastern edge of the Carsphairn Community Council area. Dumfries and Galloway Council estimate the population of the Community Council area as 186, the population spread between the village and across the wider Community Area<sup>14</sup>.

Carsphairn is a rural community set in a beautiful part of Dumfries and Galloway, adjacent to the Galloway Forest Park and Dark Sky Park and within the UNESCO designated Galloway and Southern Ayrshire Biosphere which is recognised as a world class environment for people and nature. It lies near the northern boundary of the Dumfries and Galloway area, equidistant from Ayr and Castle Douglas. The nearest substantial settlements are St John's Town of Dalry (pop 400<sup>15</sup>) 10km to the south of the forest, Moniaive (pop 500) 17km to the east of the forest and Dalmellington (pop 1,390) 15km NW of Carsphairn<sup>16</sup>. Outside the main settlements, population density is low, with scattered houses and occasional hamlets. There are a few houses adjacent to Muirdrochwood.

Carsphairn is part of a large, rural data zone which is just below mid-ranking in Scottish index of Multiple Deprivation. There is considerable variation in the scores for component elements: the

<sup>14</sup> <http://info.dumgal.gov.uk/CommunityCouncils/Home/Detail/47>

<sup>15</sup> <http://theglenkens.org.uk/index.php/about-the-glenkens/the-glenkens-villages/st-john-s-town-of-dalry>

<sup>16</sup> Mid-2012 population estimates of Moniaive and Dalmellington from <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/special-area-population-estimates/settlements-and-localities/mid-2012/list-of-tables> (table 3a)

area is in the 8<sup>th</sup> decile for health, education/skills and crime, but in the lowest 1% (61st of 6976 zones) for geographic access. Employment patterns have changed significantly: Hill farming employed 26 shepherds locally in the 1970s and by the 1980's over 40 people were employed locally in forestry: the figures now are one and two respectively. The expansion of windfarms locally - there are now 3 operational and three more approved – has not provided jobs: there are currently no locals employed in the renewables sector.

Community activity (see 3.3.2 and 3.3.3 below) has successfully saved some basic community infrastructure, but the lack of local employment opportunities has resulted in an ageing population and threatens the sustainability of the village: the primary school is now in a precarious situation with only three pupils and no sign of this number increasing without intervention.

### **3.3.1 Local Policy background**

Dumfries and Galloway Council relaxed planning regulation to allow the purchase of land for creation of small holdings in an attempt to attract young families to the area, but a lack of employment opportunities has meant few young people have been able to buy these holdings.

The Dumfries and Galloway Local Development Plan (2012)<sup>17</sup> considered Carsphairn as part of the Stewartry Housing Market area (which has a housing allocation of 709 units for the period 2012-2024). This plan allocated land for housing at the north end of Carsphairn village, although this appears to have been withdrawn in the proposed plan<sup>18</sup> of 2018 (not yet live). The proposed housing allocation for the Stewartry area is increased to 952 units.

The proposed plan includes a number of policies and objectives which are relevant to CCW's plans for Muirdrochwood, including:

- **OPI(f): Sustainability.** Development proposals should limit the impacts of climate change, support resilience, and promote sustainable development by: assisting the development of the local economy through sustainable economic growth; supporting reduction in carbon emissions through: passive aspects of design, including consideration of: location, layout, orientation, massing, materials, detailed design, topography, and vegetation; and supporting sustainable technologies by requiring that in the design of all new buildings at least 10% of the carbon emissions target, as calculated using current Scottish Building Regulations, be as a result of low or zero carbon generating technologies.
- **ED2: Business Development and Diversification in the Rural Area.** Proposals which expand and/or diversify existing businesses or create new ones in the rural area will be considered favourably subject to other policies in the Plan. Sites outwith settlements may be acceptable where they offer opportunities to diversify an existing business, or are related to a site specific resource or opportunity for new and existing businesses.
- **ED9(a): Tourist Attractions and Recreational Facilities.** The Council will favourably consider the development of indoor and outdoor tourist attractions and recreational facilities.

The Dumfries and Galloway Forestry and Woodland Strategy (2014)<sup>19</sup> has the vision of “Developing the region’s forests and woodlands for the benefit of all, promoting economic development and healthy communities, enriching cultural heritage, landscape and the natural environment.”

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<sup>17</sup> <http://www.dumgal.gov.uk/ldp>

<sup>18</sup> [http://www.dumgal.gov.uk/media/19739/LDP2-Proposed-Plan/pdf/PROPOSED\\_PLAN\\_JAN\\_2018.pdf](http://www.dumgal.gov.uk/media/19739/LDP2-Proposed-Plan/pdf/PROPOSED_PLAN_JAN_2018.pdf)

<sup>19</sup> [https://www.dumgal.gov.uk/media/17433/Dumfries-and-Galloway-Forestry-and-Woodland-Strategy/pdf/Forestry\\_and\\_Woodland\\_Strategy\\_April\\_FINAL1.pdf](https://www.dumgal.gov.uk/media/17433/Dumfries-and-Galloway-Forestry-and-Woodland-Strategy/pdf/Forestry_and_Woodland_Strategy_April_FINAL1.pdf)



Theme B Woodlands and Sustainable Growth includes the following policy objectives:

- Promote greater use of sustainable construction using local timber and supporting greater added value to local forest products,
- Support forestry employment and skills development, and
- Further develop and enhance forestry related tourism

And the following key action:

- Encourage and support greater private sector provision of both forest based tourism facilities and associated support services such as accommodation

Theme C: Woodlands and Climate Change includes the following policy objectives:

- Encourage sustainable forest management practices and appropriate woodland expansion (including greater diversity of the woodland resource) to mitigate the effects of Climate Change, and
- Encourage effective development of renewable energy from forests in the form of biomass woodfuel and the integration of appropriate renewable energy schemes within forests and woodlands

Theme D: Woodlands for People includes the following policy objectives:

- Encourage and promote the use of forests and woodlands to improve health and wellbeing in a variety of ways
- Encourage and promote the use of forests and woodlands for outdoor learning
- Increase the opportunities for access and links to and enjoyment of forests and woodlands by all sectors of society, particularly by .... promoting community development and participation in woodland management

This suggests that there is strong policy support from Dumfries and Galloway Council for CCW's proposals.

Muirdrochwood lies within the Galloway and Southern Ayrshire Biosphere, and CCW has signed up to the the Biosphere Charter to endorse the sustainable nature of the project and make contact with both the Biosphere staff and participating businesses. Details of the application are contained Appendix I.

### **3.3.2 Carsphairn community activity**

Carsphairn is a small but vibrant community with a number of active community organisations, several of whom own and manage assets (see 3.3.3 below). The Community Council is very active in responding to local issues such as wind farm applications and road conditions. The community website, [www.carsphairn.org](http://www.carsphairn.org) is maintained by members of the community and details all the activities and groups, along with useful information for visitors such as details of leisure opportunities (such as astronomy and hillwalking), local history, maps, nearby facilities, as well as giving access to planning applications and active forestry grants and licences.

Other notable local organisations include the Carsphairn Pastoral and Horticultural Society, founded in 1875 to promote the agricultural produce of the Parish, which organises an annual show held on the first Saturday in June. The Carsphairn Renewable Energy Fund Ltd<sup>20</sup> (CREFL) is a company set up to administer community benefit funds given annually to Carsphairn by the owners of Windy Standard and Wetherhill windfarms and is anticipated to be a valuable source of funds for projects and Muirdrochwood.

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<sup>20</sup> <http://carsphairn.org/CREFL>



A Resilience Group has been set up to help the community work together to develop robust arrangements for dealing with incidents. The group was instrumental in helping during the village flooding of 2015/16 and has sourced emergency supplies for the community such as sand bags, torches and blankets. Two community defibrillators have been acquired, one kept by the shop, the other in Lagwyne Hall, with many community members having received training to use them.

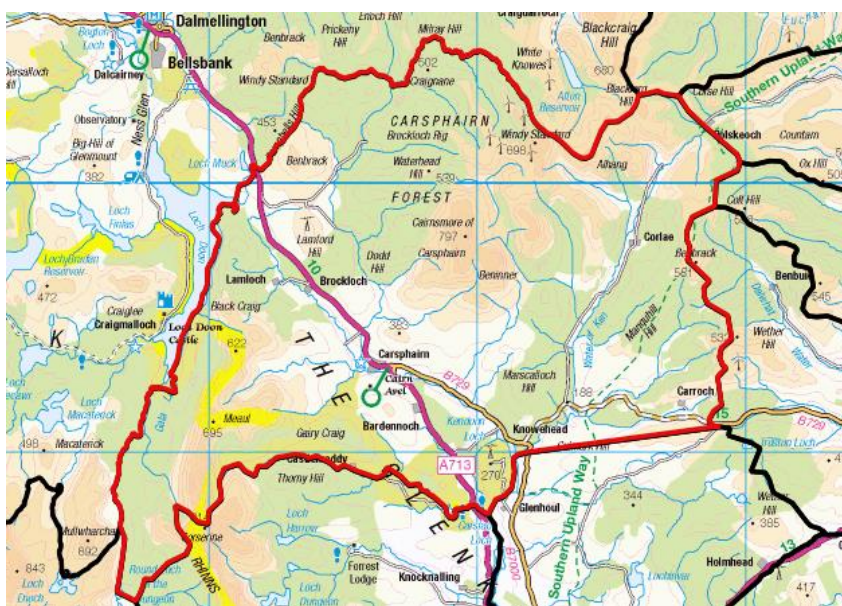
### 3.3.3 Carsphairn community assets

Community ownership of assets is not a new idea in Carsphairn: the community have acquired or established several assets over the years:

- The Carsphairn Heritage & Craft Centre was built in 1992 and is run by the Carsphairn Heritage Group (a charitable company).
- The Carsphairn Shop & Tearooms has been community owned since 1995 when a Community Council steering group raised the funds to purchase the premises. A company, Carsphairn Village Shop Ltd (CVSL), was formed to manage the shop, which is leased to tenants.
- Lagwyne Hall, Carsphairn's village hall, is situated opposite the Heritage Centre. The hall is available to hire and hosts a very wide range of community activities. Facilities include a well-equipped kitchen, lounge area, a large hall with marked badminton court, a curtained stage and toilets. The post office is run once a week from the hall. The hall is WiFi enabled and an air to air heat system keeps it at a comfortable temperature year-round.
- The Carsphairn Community Garden was opened in 2011 after a group of dedicated volunteers, aided by the Community Council, transformed an area of derelict land in the heart of the village. The garden has picnic benches and a great view of the hills with a viewpoint board at the top of the garden and is well used by the school, by locals and by visitors passing through.

### 3.3.4 Carsphairn Community Trust

Carsphairn Community Trust (CCT) is a Scottish Charitable Incorporated Organisation (SCIO) registered on 10 October 2013. CCT is a single-tier SCIO and was initially established to work with other community groups to develop a Future Plan, providing a framework for identifying and prioritising projects to be funded with wind-farm community benefit funding. CCT's area of operation is the Carsphairn Community Council area as shown in map 3 below.



**Map 3: Carsphairn Community Council / CCT membership area<sup>21</sup>**

<sup>21</sup> from Dumfries and Galloway Council website <http://www.dumgal.gov.uk/index.aspx?articleid=15979&cc=Carsphairn>

CCT's constitutional purposes are:

- The making of educational grants to persons ordinarily resident or employed or self-employed in the Area of Benefit
- The creation of and improvement of existing facilities in the Area of Benefit to encourage community association and recreation
- The creation and improvement of existing facilities in the Area of Benefit to assist young persons, the elderly and disabled to participate in community activities
- The promotion of environmental protection
- The co-operation with charities registered under Charities and Trustee Investments (Scotland) Act 2005 which carry out similar purposes in areas which adjoin the Area of Benefit.

As a single-tier SCIO CCT is not eligible to use the Asset Transfer provisions of the Community Empowerment (Scotland) Act 2015. A new community organisation, Carsphairn Community Woodland Ltd, has been established to take forward community acquisition of Muirdrochwood, detailed in section 3.4 below.

### **3.3.5 CCT Communication and Community Engagement**

CCT has a webpage<sup>22</sup> as a section of the Carsphairn community and post updates to the Carsphairn Facebook page<sup>23</sup>. The group carried out a number of specific communication and community engagement activities during the planning and development phase of this project.

The Carsphairn Future Plan was produced in 2015<sup>24</sup>. This aimed to show how the community of Carsphairn would like to see the area developed in the coming years, to prioritise particular projects and indicate where wind farm community benefit funding could be directed.

CCT worked with the Stewartry CVS to develop a 51-question survey covering 5 key themes: housing, employment, transport, education and community safety which was distributed to all 165 on the electoral roll. 80 questionnaires were completed and returned (48.5%).

The highest scoring projects were a broadband upgrade and renewable energy. Community woodland was scored positively (60% of respondents), and additionally community acquisition of woodland could deliver several other higher rated priorities including tourism, community housing, environmental projects and outdoor recreation.

Following the notification of the sale of Muirdrochwood, CCT carried out a community survey to establish whether there was local support for further investigation of a community acquisition. The survey included a map of the woodland area, a brief covering letter outlining the opportunity arising from FES's repositioning programme and noted some of the benefits that other community groups have derived from acquiring and managing woodland<sup>25</sup>.

The survey had three yes/no questions

- Do you support the idea of a Community Woodland project for Carsphairn?

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<sup>22</sup> <https://www.carsphairn.org/CCT>

<sup>23</sup>

[https://www.facebook.com/Carsphairn/?hc\\_ref=ARSUjjXZaVEOY5vn5uHYnra0HACW8BjffB2YxfMUo0\\_huS5CbTg4qw\\_OuK5FjdMNgy4&fref=nf](https://www.facebook.com/Carsphairn/?hc_ref=ARSUjjXZaVEOY5vn5uHYnra0HACW8BjffB2YxfMUo0_huS5CbTg4qw_OuK5FjdMNgy4&fref=nf)

<sup>24</sup> Available from <https://www.carsphairn.org/CCT>

<sup>25</sup> Results available at [http://carsphairn.org/docs/CCWL/Community\\_Woodland\\_Results.pdf](http://carsphairn.org/docs/CCWL/Community_Woodland_Results.pdf)

- Would you be interested in becoming a Member of a Community Group that manages the woodland?
- If the opportunity to be on the board of a Community group that manages the woodland arose, would you consider becoming a Director?

56 responses from 33 addresses were received – 39% of the population responded

	<b>Woodland</b>	<b>Membership</b>	<b>Directorship</b>
Yes	40	32	13
No	13	21	39
Neutral	3	3	4

**Table 5: Woodland survey responses**

In October 2017 CCT were awarded £10,000 Stage 1 funding by the Scottish Land Fund to enable the production of this business plan, as well as a contribution to the costs of the valuation and the community consultation.

A public consultation event was held at Lagwyne Hall on 5 October 2018, attracting a total of 58 visitors. The event ran from 1pm to 7pm, featured display boards with maps and photos outlining CCW's initial proposals for the forest. Nine of the CCW Board were available to discuss these proposals with members of the community, who were invited to join CCW if they had not already done so and complete the woodfuel survey. A fuller report on this event is included as Appendix 2.

During the development of this project CCT/CCW directors have looked at other community woodland groups both through various websites and visits – NW Mull Community Woodland was visited in 2014 and a talk by the group attended locally in 2016, Kilfinan was visited in June 2018 utilising the Scottish Community Alliance' Community Learning Exchange Programme and Abriachan and Aigas in October 2018 through the Community Woodlands Association Conference. These contacts and experiences have helped shaped the direction and content of the project.

### **3.4 Carsphairn Community Woodland Ltd**

As noted previously CCT is not eligible to use the Asset transfer provisions of the Community Empowerment (Scotland) Act 2015. A new community organisation: Carsphairn Community Woodland Ltd,<sup>26</sup> has been established to take forward community acquisition of Muirdrochwood.

CCW's defined community area is the Carsphairn Community Council area (as per CCT) and additionally the area covered by the postcode unit DG7 3UD, which includes a few houses outwith the Community Council area which overlook the forest. On the map below the pink lines are community council boundaries, the red lines are boundaries of postcode units.

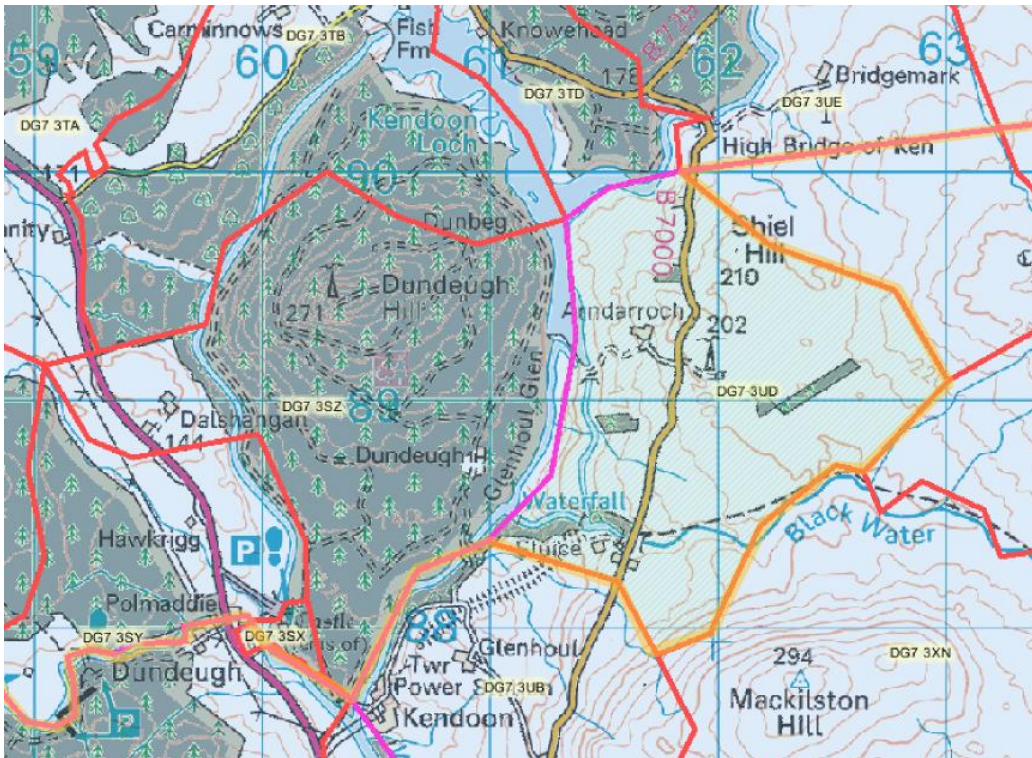
The CCW constitution has been drawn up using the model template for Asset Transfer provided by the Scottish Government<sup>27</sup> and is available online from the Companies House website<sup>28</sup>. The constitution is intended to meet the requirements of the charity test and it is intended to seek charitable status before finalising the acquisition. As of 29<sup>th</sup> October 2018 CCW has 41 members.

<sup>26</sup> Company Number SC591976, incorporated 20 March 2018

<sup>27</sup> <https://beta.gov.scot/publications/asset-transfer-model-documents/>

<sup>28</sup> <https://beta.companieshouse.gov.uk/company/SC591976/filing-history>





**Map 4: Postcode unit DG7 3UD<sup>29</sup>**

Pink lines are Community council boundaries, red lines postcode units.

Orange line is CCW boundary, green hatched area shows area covered by DG7 3UD

### 3.4.1 Purposes

The purposes of CCW are as follows:

- To manage community land and associated assets for the benefit of the Community and the public in general.
- To advance citizenship and community development, including rural regeneration, through the encouragement of voluntary activity, increasing the involvement of individuals in community activity, the improvement of the physical, social and economic infrastructure and by assisting people who are at a disadvantage because of their social and economic circumstances.
- To provide or advance the accessibility of recreational, facilities, and/or organising recreational activities, which will be available to members of the Community and public at large with the object of improving the conditions of life of the Community.
- To advance the provisions for educational opportunities in the Community relating to environment, culture, heritage and/or history.
- To advance environmental protection or improvement including preservation, sustainable development and conservation of the natural environment, the maintenance, improvement or provision of environmental amenities for the Community and/or the preservation of buildings or sites of architectural, historic or other importance to the Community.

### 3.4.2 Board of Directors

CCW's constitution specifies that the minimum number of Directors is five, the maximum ten, and that the majority of Directors shall be ordinary members. There are currently ten Directors – brief biographies are contained in Appendix 3.

<sup>29</sup> Map from SG Rights to Buy mapping tool <http://crtb.sedsh.gov.uk/crtb/>

## 4 The CATS process

The Muirdrochwood block was identified for disposal by FES as part of the then named Repositioning Programme<sup>30</sup>. The local community was, along with other stakeholders, informally advised of the forthcoming sale in July 2016 and formally notified of the intention to dispose of the property in October 2016.

CCT registered an interest in acquiring Muirdrochwood on 14 October 2016.

FES responded on 18 November 2016, advising the community that FES was developing a new scheme for asset transfer to comply with the requirements of the Community Empowerment Act and build on the National Forest Land Scheme, which closed in the summer. The new Community Asset Transfer Scheme (CATS) would be launched when the asset transfer regulations came into force, subject to approval by the Scottish Parliament, on 23 January 2017.

The woodland survey carried out in the community early in 2017 showed 71% of respondents were in favour of the acquisition of Muirdrochwood.

CCT issued an invitation to tender for a Feasibility study and Business plan in April 2017. Two responses were received.

CCT's initial application for stage one funding from the Scottish Land Fund was refused as only two tenders had been received, and they had significant divergence in the amounts quoted.

The Invitation to Tender was reissued in July 2017, stage 1 funding was forthcoming on this occasion and the Community Woodlands Association was confirmed as CCT's consultant in October 2017.

Later in 2017 FES discovered that larch stands in the forest were infected with *P ramorum* and determined that this necessitated significant felling both of larch and Sitka spruce, to facilitate access, mitigate windblow and increase the financial return from harvesting.

Muirdrochwood is within the SW Scotland *P. ramorum* Management Zone, however because the area of spruce to be felled exceeded the thresholds permitted, FES had to seek permission from FCS for felling.

Approval for felling was given by FCS and felling commenced March 2018. At current rate of progress felling is anticipated to be completed sometime early in 2019.

### 4.1 Draft Plan

CWA produced a draft plan for CCT in February 2018. This compiled background information on the woodland and contained two very significant chapters addressing initial issues

#### 4.1.1 Options appraisal of governance models and recommendations

This chapter explained the requirements of the CATS process and the Scottish Land Fund, compared the Asset Transfer and Community Right to Buy models, outlined the three governance

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<sup>30</sup> Now known as the New Woodland Investment Programme

forms (Company Ltd by Guarantee, Scottish Charitable Incorporated Organisation, Community Benefit Society), gave a briefing on charitable status and tax, trading subsidiaries and provided recommendations including notes on detailed constitutional aspects.

#### **4.1.2 Appraisal of acquisition and development options**

This chapter appraised the options for acquisition: whether CCT should seek to acquire the entire forest or to concentrate on developing an Asset Transfer Request for a smaller area of woodland. The land (and other) demands of various possible projects and initiatives were considered, to illustrate which require a whole forest acquisition and which could be equally well delivered in a relatively small area. Finally the prospects for a successful funding bid for acquisition of the entire forest and the likelihood of a positive cashflow from forest management in the short to medium term (5-10 years) were assessed.

#### **4.2 Valuation**

The forest was valued by the District Valuer, jointly instructed by FES and CCT in April 2018, whilst FES felling operations were in progress, with the valuation intended to reflect the situation once felling was complete (i.e. with substantial bare land awaiting restocking).

The forest was valued in three lots, with the methodology relying heavily on evidence from other sales of plantations and bare land. A deduction of £200,000 was made to cover the estimated cost of restocking; this was applied on a pro rata basis from the valuations for each Lot.

The DV's valuation is as follows:

Lot 1 (The main part of the plantation, to the north of the B7000 and the B720) £1,280,780  
Lot 2 (The southern block, between the B7000 and Kendoon Loch) £57,550  
Lot 3 (The remaining areas, north of the B7000 and east of the B729) £63,590  
Total £1,401,920

The valuation assumes that all the planned felling goes ahead. If some areas are not felled then it would be anticipated that an adjusted valuation would reflect this.

This valuation is valid for 6 months<sup>31</sup> “unless market circumstances change or further or better information comes to light”. Given the likely timescales for progressing the application it is anticipated that a desktop revaluation will be required by the Scottish Land Fund.

There will also be a need to confirm, once felling has been completed, that the boundaries of coupes on the ground match those in the plans, and that roads have been repaired appropriately.

#### **4.3 Community decisions**

On the basis of the information presented in the first draft plan, and with the valuation received, two key decisions were made by CCT.

a) To pursue the acquisition of the whole forest, subject to the creation of a viable funding plan covering the acquisition and inherited restock costs.

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<sup>31</sup> i.e. Until 3 October 2018

The group recognised that there were some advantages to acquiring a smaller area of woodland, and acknowledged the challenges, not least financial, in pursuing the purchase of the entire forest, but considered that the long term advantages of acquiring the whole forest were very significant. These include:

- Providing substantial long term sustainable income from timber to support community development projects,
- Providing a long term supply of material for woodfuel and wood products businesses,
- Giving ownership of a significant land holding capable of accommodating a range of future development projects,
- Providing the opportunity to greatly increase the biodiversity and amenity value of the forest by significantly increasing the proportion of broadleaves,
- Enabling the construction of trails and other recreation provision to support the development of the Outdoor Education Centre,
- Enabling the community to provide a link between the proposed Glenkens Way to the Southern Upland Way,
- Giving ownership of the quarry, reducing costs for path works and providing venues for activities.

b) To prioritise some key projects for delivery in the first five years, and to create a further list of projects and initiatives to be developed when capacity and finances allow.

The priority projects are discussed in section 5 below, and include:

- Forest management operations (restocking felled areas and harvesting spruce crops)
- Community volunteering
- Recreation infrastructure
- Woodfuel and wood products
- Outdoor education centre

Costings have been provided for these projects

The future projects are discussed briefly in sections 6 and 7 below, and include

- Affordable housing
- Tourist accommodation
- Huts
- Woodland burials
- Non-timber forest products
- Rural Skills training
- Mountain biking
- Health initiatives

Costings have not been provided for these projects

## 5 Development Plan

The acquisition and management of Muirdrochwood to deliver the intended community benefits will entail a number of managerial and practical tasks, which have been grouped into the following workstreams:

1. Community Acquisition
2. Management and Governance Systems
3. Community Forest Manager and Forest Worker
4. Forest Management Planning
5. Forest Management Operations
6. Community Volunteer Development
7. Recreation infrastructure
8. Woodfuel & wood products
9. Outdoor Education Centre

### 5.1 Community Acquisition

Acquisition of the forest will take place via FES's Community Asset Transfer Scheme<sup>32</sup>, which follows the provisions of part 5 of the Community Empowerment (Scotland) Act 2015<sup>33</sup>. The Asset Transfer Request (ATR) must state the price that the Community Body is offering to pay for the asset, this can be at market value as assessed by an independent valuer (see section 4.2 for fuller discussion) or at a lower amount, with the discount requested being justified in terms of the additional public benefit to be delivered.

CCW intend to request a discount of £250,000, based on the very high levels of public benefit expected to accrue from community ownership, management and development of Muirdrochwood. The justification for discount is contained in section 8 below.

It is anticipated that CCW will apply for the majority of the purchase price (and legal fees) to the Scottish Land Fund (SLF)<sup>34</sup>, which supports communities to become more resilient and sustainable through the ownership and management of land and land assets, and can fund up to 95% of eligible project costs. A discount against the market value can be considered as match funding.

SLF support is usually capped at £1M per project although there is discretion to exceed this cap, as shown recently at Ulva<sup>35</sup>. It is anticipated that the purchase price for Muirdrochwood, even with discount, will exceed £1M and whilst CCW intend to apply for the majority of this from SLF, it is anticipated that significant additional funding will be required.

CCW expect to raise the additional funding required by taking a loan against future timber income.

Once the acquisition is concluded a celebratory event will be held to publicise community ownership and promote opportunities for community members to get involved.

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<sup>32</sup> <http://scotland.forestry.gov.uk/managing/get-involved/community-asset-transfer-scheme>

<sup>33</sup> <http://www.gov.scot/Topics/People/engage/CommEmpowerBill>

<sup>34</sup> <https://www.biglotteryfund.org.uk/scottishlandfund>

<sup>35</sup> [https://www.biglotteryfund.org.uk/global-content/press-releases/scotland/190318\\_sco\\_slf\\_ulva](https://www.biglotteryfund.org.uk/global-content/press-releases/scotland/190318_sco_slf_ulva)



### 5.1.1 Valuation and estimated base purchase price

The District Valuer (DV) valued the three lots<sup>36</sup> at Muirdrochwood as follows:

Lot	Area (ha)	DV valuation
Lot 1	282.65	£1,280,780
Lot 2	20.21	£57,550
Lot 3	21.09	£63,590
Total	323.95	£1,401,920

**Table 6: Breakdown of valuation by lots**

This was on the basis of valuing the ~94ha to be felled as bare land (so taking out approx. £500,000 in timber value) and subtracting a further £200,000 to meet the restocking obligation. The DV's figures equate to a pre-harvest valuation of ~£2.1M which represents a substantial increase vis-a-vis the indicative valuation provided by FES in 2017.

It should be noted that the DV appears to have allocated the restocking costs according to the total area of the lots rather than the felled area within the lots. If the felling in Lots 2 & 3 does not take place, these two areas would be valued with standing timber, and without a reduction for restock (see table below)

Lot	Area (ha)	Likely valuation
Lot 2	20.21	£115,000
Lot 3	21.09	£80,000
Total	41.30	£195,000

**Table 7: re-estimation of valuation for Lots 2 & 3 if no felling by FES**

This would increase the overall price by ~£73k (using the DV's calculation methods), so we have worked on the basis of a rounded overall base price of £1,475,000. CCW will also incur legal fees, these are estimated at £10,000.

Item	£
Acquisition costs	1,402,000
Allowance for unfelled stands	73,000
Discount	-250,000
Legal fees	10,000
<b>Total</b>	<b>1,235,000</b>
Scottish Land Fund	1,000,000
Local fundraising	35,000
Loan against future timber income	200,000
	<b>1,235,000</b>

**Table 8: Acquisition costs and income**

<sup>36</sup> See DV report supplied separately

## 5.2 Management and Governance Systems

Post-acquisition, responsibility for management of the woodland will be vested in the Board of the CCW, which will establish appropriate management and governance systems. Decisions will be made collectively, however individual Board members will be identified to lead on specific areas.

The Board will elect a Chair, Treasurer and Secretary from amongst their number. One of the Directors will take on the role of Line Manager for the Community Forest Manager (see 5.3 below) and two additional roles will be established:

- Safety officer, responsible for ensuring appropriate insurances are maintained, oversight of risk assessments for activities in the woodland and compliance with relevant Health and Safety legislation.
- Communications officer, responsible for regular communication with the membership – e.g. via the body's Facebook page

CCW will seek appropriate professional assistance to support the Board and Community Forest Manager as required. CCW has joined the Community Woodlands Association (CWA) which provides advice, assistance and information to community woodland groups across Scotland. CWA organises training and networking events on a range of topics for member community groups, and through CWA's membership of the Scottish Community Alliance, CCW will be eligible for the Community Learning Exchange, which supports community groups to visit their peers (and have already undertaken one such visit, to Kilfinan Community Forest Company). In addition to support delivered "in-house", CWA operates a "mentor" scheme by which private sector foresters are available to give practical advice and support to CWA member groups on an ad-hoc basis. Additional advice on a range of topics including funding and volunteer management may be available from the Stewartry Council of Voluntary Service<sup>37</sup>.

There will be a number of annual recurring costs associated with management and governance systems, such insurance and the preparation of annual accounts, as well as office costs, consumables and sundry expenses. These costs are estimated at £8,500 per annum<sup>38</sup>, with some additional office setup costs in year 1.

The compulsory VAT registration threshold is currently £85,000 over a 12 month period. It is anticipated that VAT registration will be required for CCW. All figures in the budgets and cashflow below are net of VAT.

For simplicity all costings are at current prices, i.e. there is no adjustment for inflation.

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<sup>37</sup> <http://www.stewartrycvs.org.uk/>

<sup>38</sup> This includes insurances for woodfuel and wood products operations. OEC insurances are considered separately

### **5.3 Community Forest Manager and Forest Worker**

CCW will recruit a full-time Community Forest Manager (CFM) to manage Muirdrochwood and deliver the CCW Business Plan. This will be a 5-year post, initially funded by a revenue grant from the Scottish Land Fund, and line-managed by a Director. A draft job description is included as Appendix 4.

CCW will identify and equip appropriate office space for the Community Forest Manager.

The key responsibilities of the role will include:

- completing the Long Term Forest Plan and associated funding applications, and then implementing the plan;
- promoting and coordinating community involvement in the management of Muirdrochwood, and developing Muirdrochwood as a venue for community volunteering.
- tendering for and managing forestry and other contractors and coordinating sales of timber and firewood
- ensuring that large scale development projects such as the outdoor education centre are integrated with forest management proposals
- developing future projects e.g. tourism accommodation facilities, affordable housing

CCW will also recruit a full time Forest Worker (starting month 4 year 1)

The Forest Worker's responsibilities will include sawmilling and the processing and delivery of woodfuel (see section 5.8 below) plus a range of forest management and maintenance tasks.

If it makes sense logistically this could be two part-time posts. If demand for woodfuel and wood products expands beyond the modest levels projected in this plan then additional staff will be engaged.

The Forest Worker will be line-managed by the Community Forest Manager.

THE CFM starting salary will be £28,000, it is anticipated that this will be funded in the first year by a revenue grant from SLF, then from years 2-5 by revenue funding from other sources (e.g. South of Scotland Enterprise Agency, LEADER replacement fund, CREFL). From Year 6 onward the CFM post will be funded through the proceeds of timber harvesting and income from other projects.

The Forest Worker starting salary will be £20,000, this will be funded primarily through the woodfuel and woodproducts business.

CCW will establish a staff pension scheme and make an employers contribution of 3% of salary.

The 25 year cashflow includes Year 1 recruitment costs of £1,500 and an annual T&S and training budget of £2,000.

## 5.4 Forest Management Planning

There are a number of formal actions which will need to be taken post-acquisition to ensure access to Scottish Rural Development Programme (SRDP) grant schemes.

CCW will register with the Scottish Government Rural Payments and Inspections Directorate (RPID) to obtain an Business Reference Number (BRN), and then register Muirdrochwood with RPID and obtain a Land Parcel Identifier (LPID): this is a requirement for the SRDP. Once registered CCW will apply to the SRDP Forestry Grant Scheme<sup>39</sup> for funding to prepare a Long term Forest Plan (LTFF). This is a requirement for access for other grant funding for woods over 100ha.

### 5.4.1 CCW Objectives

CCW is seeking to create a forest with significant structural and species diversity that contributes positively to biodiversity and is of high amenity value. In the short term significant income from timber harvesting is required to support community acquisition. In the longer term income from regular timber harvesting will support the maintenance of recreational and other facilities in the forest as well as providing investment capital for development projects.

CCW's aspiration is to manage the forest under a continuous cover system, however it is anticipated that across much of the site this will only come into effect in future rotations.

### 5.4.2 FES Forest Design Plan

As part of the process of acquiring the forest CCW will be required to adopt (temporarily) the current FES Forest Design Plan, initially approved in 2013 but amended in 2017 after the identification of *P ramorum* infection to reflect the new harvesting plans.

The 2013 Forest Design Plan acknowledged that the lack of species diversity across the Castlemaddy plan area would not meet modern norms and proposed a modest diversification: Sitka would remain the dominant species, but there would be more open space and increased employment of broadleaves and alternative conifers sufficient to meet UK Forest Standard requirements.

The 2017 amendment was required because the level of spruce felling determined necessary by FES exceeded the threshold for automatic approval within the *P. ramorum* Management Zone. In addition to rescheduling harvesting operations, FES submitted an amended future forest species plan which included significant revisions including very substantial use of Douglas fir and Norway spruce. The rationale for these changes is unclear.

CCW consider that the current FES restocking plan is inappropriate in a number of respects: it does not meet CCW's objectives for sustainable community management and it is not practical, particularly with respect to extensive use of Norway spruce and Douglas fir for the restocking of much of the 2018 clearfell. The forest has no external deer fence and establishing these species on this scale would be challenging and potentially prohibitively expensive.

CCW also consider that, in some other respects, the FES plan is not silviculturally sound, as:

- It includes larch restock, which seems unwise, given the current *P ramorum* infection.

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<sup>39</sup> <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/woodland-improvement-grant/long-term-forest-plan/> The grant rate is £25 per hectare for first 200 hectares, £5 per hectare thereafter.

- It includes several small blocks of Scots pine, which is not well suited to site conditions. One proposed stand is in an area currently heavily waterlogged and occupied by Sitka growing at ~YC6: prospects for successful establishment of SP here are very poor.
- It includes substantial use of lodgepole pine in mixture with Sitka spruce, even in compartments where the current spruce crop is YC20.

CCW note that the amendments to the Plan were submitted by FES after they had committed to selling Muirdrochwood: FES has never had any intention to implement these proposals.

### 5.4.3 CCW Long Term Forest Plan proposals

CCW's forest design proposals are shown in **Muirdrochwood Map 5: CCW restocking proposals** (supplied separately) and are intended to meet community objectives for sustainable forest management. They feature:

- Increased area of broadleaves to cover more than 30% of the forest area: with a greater use of site-appropriate broadleaves on better soils, including some at productive spacing, whilst birch will be used on upper slopes.
- Increased use of designed open ground to benefit biodiversity and amenity, to ~11% of the total forest area.
- Greater connectivity of broadleaved stands and open space.
- Retention of Sitka spruce as the primary timber species, but focussed on appropriate ground, and at a reduced overall percentage of 43%.
- A further 47.5 ha of conifers (Norway spruce, Douglas fir and mixed conifers) will be planted on appropriate sites on lower slopes for timber and environmental (e.g. Norway spruce for red squirrel habitat) objectives.
- FES's proposed 68ha of lodgepole pine will not be used. Sitka (and other conifers) will only be planted where they will deliver productive crops (YC14+) without a nurse.

Restocking will be achieved by a combination of natural regeneration (primarily spruce and birch) and planting.

The table below compares the species breakdown by area in hectares and percentages of

- The forest in 2017 (i.e. prior to the current harvesting operations)
- FES's future plan (mixtures have been assumed as 50/50)
- CCW's proposed Long Term Forest Plan

Species	2017		FES		CCW	
Sitka spruce	233.2	72%	97.8	30%	140.0	43.2%
Lodgepole pine			64.8	20%	0.0	0%
Norway spruce			49.1	15%	23.0	7.1%
Douglas fir			24.1	7%	15.5	4.8%
Scots pine			6.9	2%	0.0	0%
Larch	54.3	17%	3.4	1%	0.0	0%
Mixed conifers			2.2	1%	8.5	2.6%
Birch	8.1	2%	28.5	9%	41.0	12.7%
Mixed broadleaves	11.7	4%	31.6	10%	58.5	18.1%
Open ground	16.7	5%	15.7	5%	37.5	11.6%
<b>Total</b>	<b>324.0</b>		<b>324.0</b>		<b>324.0</b>	
Total conifer	287.5		248.2		187.0	
Total broadleaf	19.8		60.1		99.5	

**Table 9: comparison of species composition of FES and CCW future plans.**

## 5.5 Forest Management Operations

CCW's aspiration is to manage the forest under a continuous cover system, however given the preponderance of single-age Sitka stands it is anticipated that this will only be fully delivered in future rotations.

A small area of spruce to the west of the old farmstead will be maintained as long term retention, but otherwise Sitka spruce stands in the main block will be clearfelled, after thinning where windblow risk and ground conditions permit.

The Sitka spruce stand in the south-western block will be progressively thinned and but not scheduled for clearfell.

Existing areas of broadleaves will be maintained as long term retention, potentially with thinning operations to manage species mix and promote biodiversity and expanded as opportunity arise through natural regeneration and/or planting.

The small area in the southern block adjacent to the river and loch identified as Plantation on Ancient Woodland Site and currently occupied by mature larch will be restocked with mixed broadleaves, predominantly oak and hazel.

Open space is a key element of diversity within woodland. Over the course of the establishment of the next rotation open space within the main forest block will be increased to ~11% from the current 5%.

Woodland diversity and biodiversity value is enhanced by long term retention of older trees, deadwood retention and permanent habitat corridors. CFT will seek to:

- Develop a long-term forest structure of linked permanent habitats, such as riparian corridors, open space and broadleaves.
- Leave a proportion of standing and fallen deadwood in each forest management unit, with concentrations in areas of high ecological value,
- Where windblow and ground conditions permit, identify small stands of older trees for retention.

### 5.5.1 Harvesting operations - general

CCW's future harvesting plans will be subject to FCS approval through the Long Term Forest Plan process. CCW's proposals are shown in **Muirdrochwood Map 6: CCW felling proposals** (supplied separately) and **Muirdrochwood Map 7: CCW thinning proposals** (supplied separately)

Felling plans must conform to UK Forest Standard<sup>40</sup> requirements; e.g. "In forests characterised by a lack of diversity due to extensive areas of even-aged trees, retain stands adjoining felled areas until the restocking of the first coupe has reached a minimum height of 2 m; for planning purposes this is likely to be between 5 and 15 years depending on establishment success and growth rates."<sup>41</sup>

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<sup>40</sup> [https://www.forestry.gov.uk/pdf/FCFC001.pdf/\\$FILE/FCFC001.pdf](https://www.forestry.gov.uk/pdf/FCFC001.pdf/$FILE/FCFC001.pdf)

<sup>41</sup> UKFS p33

As the 2018 FES fellings are of a considerably greater scale and layout – effectively one 85ha coupe through the middle of the site - than would usually be approved, this imposes some significant constraints on future management.

CCW note that the 2018 FES fellings will leave a number of “island” blocks which are considered vulnerable to windblow. Ideally these could be felled relatively quickly before the onset of significant windblow however the adjacency rules quoted above mean that it is not possible to schedule felling in this way. Once windblow is underway (i.e. affecting >20% of the stand) then it is possible to submit an amendment to the LTFP.

Harvesting operations will predominantly be carried out by conventional mechanised means, with some small scale motor-manual (chainsaw) felling for path clearance and small-scale thinning (e.g. of broadleaves).

### 5.5.2 Harvesting operations – phase 1 (2019-2023)

Three blocks, with a total area of 24.7 ha of conifer are identified for felling in the first 5 year management phase. This includes:

- 19.9 ha of Sitka spruce: standing volume estimate for 2023 is 9200m<sup>3</sup>
- 4.8 ha of larch: standing volume estimate now 1300m<sup>3</sup>

Some of this larch is already showing symptoms of P ramorum and felling will have to take place early in the 5 year period. Permission to fell these larch stands was obtained by FES and will carry forward to CCW. Across the forest there is a further 1ha (approximately ) of larch, much of which is also infected, which was not included in the FES felling plans; CCW would be required to seek permission (e.g. through the LTFP process) to fell these areas if it wished to do so before the trees died.

A further 87ha of Sitka spruce has been identified for thinning in the first 5 years: estimated volume to be harvested in 2023 is 5000m<sup>3</sup>.

### 5.5.3 Harvesting operations – future phases

Long term harvesting proposals are shown in map 6 above. These may be subject to amendment due to changing circumstances e.g. windblow.

Over the first 25 years CCW will fell just over 140ha of spruce, with an estimated volume of 49,300m<sup>3</sup>, as shown in the table below.

Plan period	Area of spruce clearfell ha	Estimated volume m <sup>3</sup>
Phase 1 (2023)	19.9	9,200
Phase 2 (2028)	37.9	11,100
Phase 3 (2033)	29.9	11,300
Phase 4 (2038)	31.0	9,800
Phase 5 (2043)	22.2	7,900
Total	140.9	49,300

**Table 10: Estimated clearfelling areas and volumes**

Thinning operations will also be carried out where stand conditions allow and growth rates make it worthwhile. Estimated areas and volumes are shown in the table below. The area of spruce available for thinning declines through the plan period as stands are harvested.



Plan period	Area of spruce thin ha	Estimated volume m3
Phase 1 (2023)	87	5,000
Phase 2 (2028)	111	4,500
Phase 3 (2033)	90	4,300
Phase 4 (2038)	64	3,100
Phase 5 (2043)	42	2,100
Total		19,000

**Table 11: Estimated thinning areas and volumes**

Estimated income from harvesting is show in table 12 below. Calculation of felling income incorporates modelling of sawlog outturn based on stand productivity and previous thinning regime, so £/m3 rate varies between felling periods. 100m3 per annum will be retained for the CCW sawmill and 400m3 per annum for the CCW woodfuel business: these volumes have not be incldued in the calculcation of income.

Year	Fell vol	fell £	Thin vol	thin £	cost	total net £
2023	9,200	320,200	5,000	84,000	28,400	<b>375,800</b>
2028	11,100	341,025	4,500	70,000	31,200	<b>379,825</b>
2033	11,300	373,000	4,300	64,400	31,200	<b>406,200</b>
2038	9,800	318,050	3,100	30,800	25,800	<b>323,050</b>
2043	7,898	261,828	2,100	2,800	19,996	<b>244,632</b>

**Table 12: Estimated income from harvesting**

Note: “cost” is allowance for marketing, signage, road repairs.

#### **5.5.4 Harvesting post 2043**

After 25 years there will still be 52.2 ha of the current Sitka crop remaining, with an estimated standing volume of 16,400m3

Regenerated and planted stands from the post 2018 restocking will be available for thinning from 2045, enabling a continuing supply of timber from the forest.

#### **5.5.5 Restocking**

Forest Enterprise Scotland is felling ~86ha<sup>42</sup> of larch and spruce in the main block in spring 2018. CCW will seek to restock ~80ha of this area, retaining the rest as managed open ground for biodiversity and amenity purposes (NB actual area required to be restocked, and timings, to be confirmed by FCS South Scotland Conservancy).

Future grant regimes for restocking are uncertain. For the purposes of cashflow it has been assumed that no grant will be claimable for restocking areas which have been felled by FES. For future harvesting areas a restocking grant rate of £400 felled ha has been estimated. CCW will seek to restock using a mix of natural regeneration and planting. Areas where natural regeneration is not apparent after year 3 will be planted. CCW will seek to phase planting over three years, the better to enable the use of volunteers.

<sup>42</sup> Note that this is the area formally approved for felling, the actual area felled has yet to be checked.

Natural regeneration is likely to be predominantly birch and Sitka spruce (and possibly larch). Whilst this species mix is sub-optimal from amenity and biodiversity perspectives, utilising natural regeneration has significant advantages, notably in terms of reduced cost (plants, planting, maintenance, deer management) at the beginning of the rotation, which more than outweigh any additional costs of cleaning and thinning overstocked stands later on.

Natural regeneration also potentially facilitates at least some site occupancy quicker than waiting for planting – the scale of harvesting being undertaken will have very significant visual impacts and the sooner some of the felled ground “greens up” the better.

Successful natural regeneration requires a seed source and appropriate ground conditions. It is anticipated that the latter is more likely to be present in the larch areas, where the limited brash cover does not inhibit seeds reaching the ground. A site assessment of ground conditions will be made once FES’s harvesting operations are complete and, if appropriate, small scale ground preparation (scarification) will be undertaken to promote regeneration in specific areas.

If (as discussed below) a local market can be found for brash this will have the added benefit of facilitating natural regeneration (and would also make planting easier).

Regeneration will be complemented by planting. A range of both broadleaved and conifer species, matched to site conditions, will be employed to deliver CCW’s varied objectives for the forest.

Sites with good access and soils will be identified and planted with broadleaved species suitable for coppicing, including sycamore, birch, hazel and willow, to provide woodfuel and material for a range of wood products. Coppicing has significant environmental benefits.

Riparian corridors will be restocked at low density with native broadleaves: willow, alder, birch, rowan, with small numbers of e.g. hazel, holly in fertile pockets.

Other broadleaved planting will be informed by site suitability: information on the FCS Map Viewer suggests much of the forest is very suitable for NVC W4 (birch) and W9 (ash-rowan) woodland, with small areas of W11 and W17 (oak-birch) woodland at the lowest margins.

Fruiting and flowering trees and shrubs, including crab apple saplings, will be planted at appropriate sites to improve the biodiversity and amenity value of the forest.

Planting of ash is currently inhibited by the threat of Chalara dieback but CCW will plant ash if resistant stock becomes available.

Remaining areas will be restocked with a range of conifer species for timber production: Norway spruce (good for red squirrels) and Douglas fir on lower slopes, Sitka spruce higher up on (relatively) poorer ground. Conifers will not be replanted in blocks where Yield Class is anticipated to be below 12. Pockets of deep peat will be left unplanted.

A small area with good access will be identified for planting mixed conifers at high density to produce some Christmas trees for the local market<sup>43</sup>.

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<sup>43</sup> The nearest current sources are Ayr/Castle Douglas shops or Kirkgunzeon for locally grown trees (<https://www.scottishchristmastrees.co.uk/>).

Species	Area ha	Regen ha	Plant ha	Cost/ha	Cost £	# plants
Sitka spruce	45.5	23.0	22.5	1,900	42,750	56,250
Norway spruce	12.0	0.0	12.0	2,150	25,800	30,000
Douglas fir	6.0	0.0	6.0	2,450	14,700	15,000
Broadleaves	16.5	6.0	10.5	2,180	22,890	21,000
	<b>80.0</b>	<b>29.0</b>	<b>51.0</b>		<b>106,140</b>	<b>122,250</b>

**Table 13: Initial restock areas by species and costs**

Notes to the table above:

- Conifer restocking @ 2,500 stems/ha
- Broadleaf restocking @ 2,000 stems/ha (in practice will vary across site)
- Costs include 10% beat-up for Sitka spruce, 20% for Norway spruce & Douglas fir
- Costs assume 5% internal open ground for glades and flushes

Costings in the table below have been based on the estimation of 29ha regeneration (23 ha Sitka, 6 ha broadleaves) with the remaining 51 ha to be established by planting. The actual amount of regeneration achieved may vary and is impossible to predict with certainty.

It is anticipated that planting will use volunteer labour as far as possible, however this would be a substantial undertaking, even phased over 3 years and may require some contract planting.

It would be possible to grow some of the trees needed from seed, however with a total tree requirement in the region of 143,000 trees (including beat up) this is a substantial undertaking and would require investment in nursery facilities.

### **5.5.6 Protection of restock**

Red and roe deer are present within the forest, and deer management effort by FES to date has been limited. Deer present a significant threat to successful restocking, and control and/or exclusion will be required.

Ring-fencing the entire forest (9000m for the main block excluding the area east of the forest road entrance) is not a viable option, neither is comprehensive internal deer fencing around all felling coupes. Temporary plastic fencing around small areas of vulnerable planting (e.g. broadleaves) may be more cost effective and will be trialled. Tree tubes will be employed for small, isolated clumps of broadleaved trees.

A significant and sustained deer culling effort is required. The CCW Board includes a fully insured and experienced marksman and it is anticipated that deer control will be undertaken internally at minimal cost. Any costs could be offset by sale of venison.

## 5.6 Community Volunteer Development

Voluntary involvement is a key component of the sometimes intangible community development benefits arising from community asset ownership. Whilst some forest management operations at Muirdrochwood will necessitate the use of appropriately skilled and qualified professional contractors, many activities have the potential to be carried out by volunteers, overseen by the Community Forest Manager and other individuals with appropriate training and experience.

### 5.6.1 Proposals

CCW will establish a community volunteering hub and actively develop and promote opportunities for volunteer activities in the woodland.

A portacabin will be acquired and installed close to the car park and a shipping container obtained to serve as a tool store. CCW will equip the portacabin (heater, chairs, crockery, first aid kit etc) and acquire appropriate tools and personal protective equipment (PPE) for volunteer groups. Power will initially be from a portable generator, until a power connection is available via the Outdoor Education Centre. A compost toilet will be installed (included in section 5.7 below).

A simple wooden shelter for protection from the elements will be constructed north of the road by volunteers. Key tasks in the forest will include tree planting and path maintenance, but a broad range of activities would be available for volunteers of all ages and abilities, including environmental monitoring and survey work.

The opportunities for involvement, whether as a group member, a volunteer or a user of the facilities, will be promoted on CCW's website / Facebook page, and also via contributing stories / pictures to local newspapers when events take place in the woodland.

Item	£
Portacabin	9,000
Kitting out	500
Generator (3kW)	250
Shipping containers 2*20ft inc delivery	3,000
Hand tools	1,000
PPE	500
<b>Total</b>	<b>14,250</b>

**Table 14: Community volunteering setup costs**

There would also be on-going costs of £500 a year (fuel £100, replacement tools & equipment £400).

It is estimated that the portacabin will require replacing after 10 years and there is provision for this in the 25 year cashflow.

### 5.6.2 Funding

Funding for infrastructure could be sought from a range of sources, including the Big Lottery Fund's Awards for All Programme, local windfarm distribution funds and any future replacement for the LEADER programme. Funding to develop and equip volunteers will be sought from the

Forestry Commission Scotland Community Fund<sup>44</sup>. This fund aims to support groups and organisations to encourage and support greater use of woods by people to derive health, well-being and community benefits. Amongst the eligible activities are facilitation of volunteering for skills training, health improvement and community development, establishment of volunteer groups and the induction of volunteers.

### **5.6.3 Future developments**

CCW will seek to establish a wood-working workshop in year 3 or 4, subject to funding. This would provide space for small scale woodland craft output. The workshop could also be used as the venue for a Men's shed group.

In the longer term there may be potential to develop the site as a venue for volunteering as part of Corporate Social Responsibility (CSR) programme; experience from other community woodlands demonstrates that beneficial long term relationships can be forged through such activities.

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<sup>44</sup> <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/communities>

## **5.7 Recreation Infrastructure**

Developing and enhancing safe public access at Muirdrochwood is a key component of community management, both to ensure that the health and amenity benefits of woodland recreation are available to as much of the community as possible, and to broaden community engagement with, and sense of ownership of, the site: this is seen as essential to the long-term flourishing of community ownership and management.

Whilst there are an increasing number of long distance waymarked walking routes in Scotland (including the Southern Upland Way a few km east of the forest), in practice most recreational visits to woodlands (and other greenspace) are of a relatively short distance and duration.

Likely entry (and car parking) points are at the south of the forest and it is expected that most visits will be concentrated in that area. This will be reflected in the works to develop recreation infrastructure in the initial period of community ownership which will have a different focus in each of the three main blocks.

As the wood is remote from local communities, visitors will primarily arrive by car, so road access, signage and adequate parking is required. Visitor experience and numbers will be enhanced by facilities: benches, picnic areas, toilets and by the development of a sense of destination “Kendoon loch viewpoint” and experience “Muirdrochwood sculpture trail”, etc.

The southern (lochside) block is envisaged as the main recreation focus of the woodland, and much of the work will be concentrated here with the objective of creating an attractive destination bringing a significant number of visitors.

The main (northern) forest block has an extensive forest road network in good condition (subject to FES carrying repairs post harvesting) extending to ~7km. The objective here will be to create a circular route to facilitate cyclists and walkers keen to enjoy the spectacular views towards the Rhinns of Kells.

The SE blocks (upstream of the High Bridge of Ken) will not be developed for recreation in the initial period, although there may be some path works associated with tourism accommodation and other development projects.

### **5.7.1 Southern block works**

There will be some surfacing (blinding and rolling) work to enhance the existing timber loading area to improve the surface and facilitate use as a carpark (approximate area 500m<sup>2</sup>). In the longer term as usage of the site increases it may be necessary to extend the carpark area.

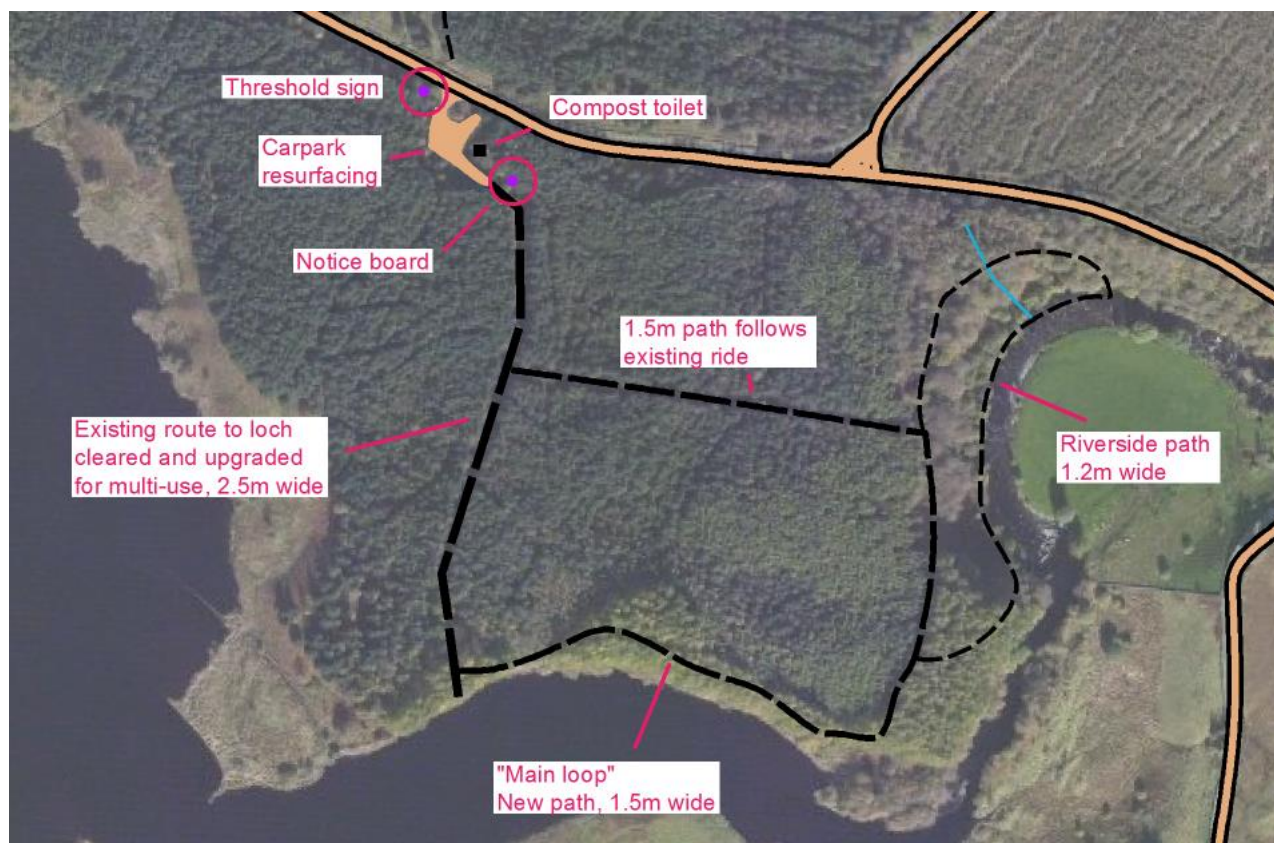
A threshold sign will be installed at the roadside, and a welcome sign / noticeboard adjacent to the carpark. A compost toilet will be constructed adjacent to the carpark.

Path construction will have three elements, each with a different specification:

- Car park to loch: 300m long, 2.5m wide, following the line of the existing overgrown track to the loch. Will be constructed for multiple use to permit vehicle access (e.g. for boat trailers) to the loch.

- Main loop: 720m long, incorporating a section of the existing ride running east-west, 1.5m wide with unbound rolled surface to Scottish Rural Development Programme (SRDP) Improving Public Access specification<sup>45</sup>.
- Riverside path: 500m long, simple path 1.2m wide with unbound rolled surface<sup>46</sup>, incorporating the (overgrown) line of an old riverside path.

3 (est) Picnic tables and 3 (est) simple bench seats will be installed at various points lochside, riverside and in the big larch area and waymarking will be provided by 10 (est) treated and routed timber waymarker posts.



**Map 8: recreational works in the southern block** (NB does not show location of benches, picnic tables etc)

### 5.7.2 Northern block works

Two new sections of path, 1.2m wide with unbound rolled surface at 450m and 350m long respectively, will connect the arms of the road network and create a circular trail for walkers and mountain bikers. Two further 300m lengths of path at similar specification will connect the forest road with the OEC and the bridge.

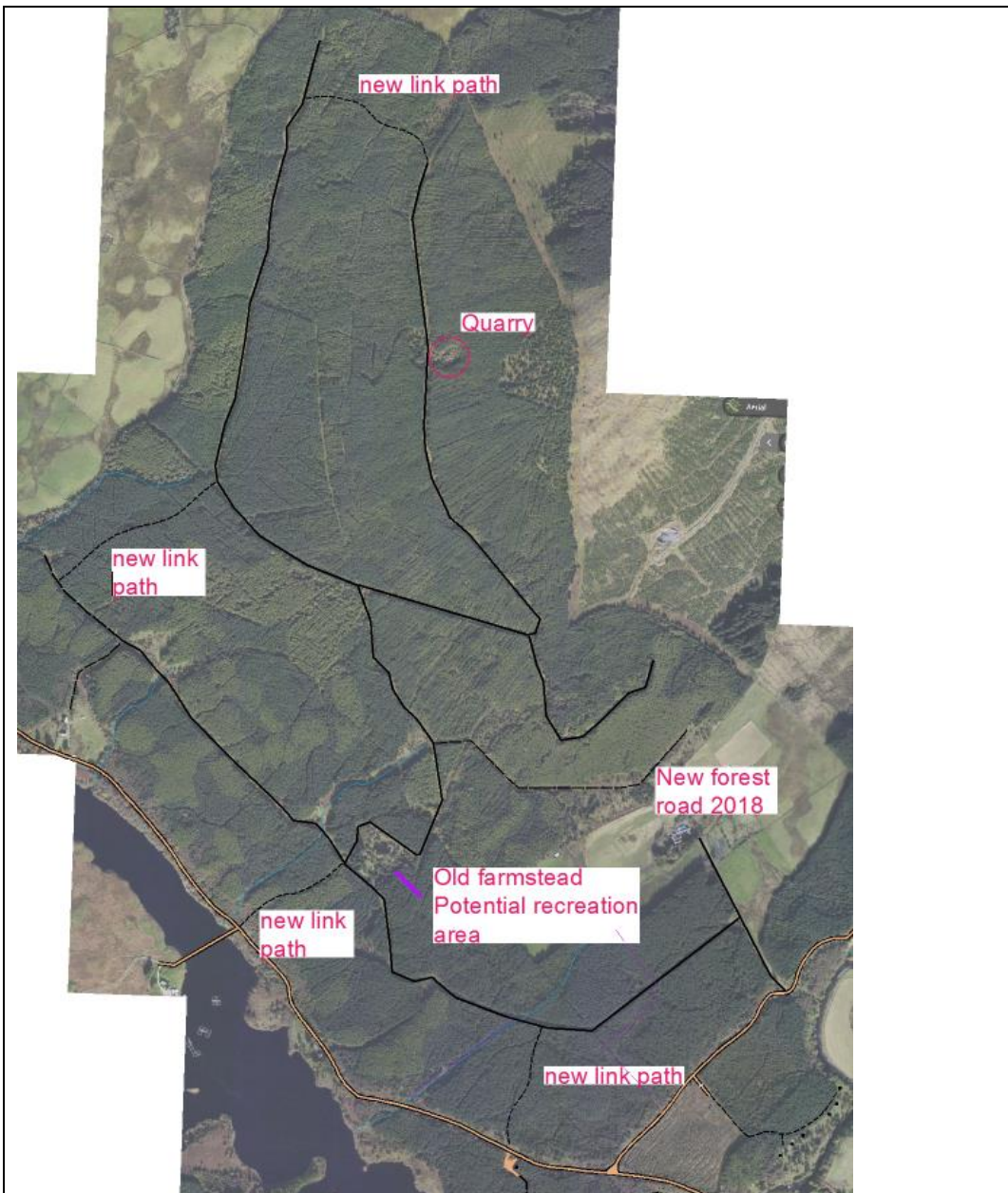
4 (est) simple benches will be installed at notable viewpoints, and 10 (est) waymarking posts will be installed to mark a circular route.

The Glenkens Red Squirrel group have funds available from the Galloway Glens Project to install hides with cameras and they have indicated they are keen to do so in this forest.

<sup>45</sup> <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/agri-environment-climate-scheme/management-options-and-capital-items/new-path---unbound-surface/>

<sup>46</sup> NB alternative construction / surfacing may be needed on riverside section to prevent flood damage





**Map 9: recreational works in the northern block** (NB does not show location of benches, picnic tables etc)

### 5.7.3 Costs & Delivery

The cost of the package of works outlined above is estimated at around £95,330 (see table below). Estimates for most items have been based (with some rounding) on the standard costs used for the SRDP Improving Public Access<sup>47</sup> scheme.

In practice costs can vary significantly from the standard: remote sites and challenging ground conditions can greatly increase path building costs, whilst access to materials (e.g. quarry stone) and volunteer labour, as anticipated here, allows delivery at lower cost, and it is anticipated that these proposals will be delivered significantly under budget.

### 5.7.4 Funding

<sup>47</sup> <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/agri-environment-climate-scheme/management-options-and-capital-items/improving-public-access/>



The majority of the path works are designed to be eligible for SRDP Improving Public Access funding, although it is noted that the future of this scheme is unclear given Brexit. Other potential funders for elements of the works include Awards for All Scotland<sup>48</sup>, Paths for All community grants<sup>49</sup>, UK Shared Prosperity Fund / LEADER replacement.

Item	year	length	width	unit	cost/unit	£
Carpark resurfacing	2			1	5,000	5,000
Composting toilet	1			1	5,000	5,000
Path N block 1	3	450	1.2	540	18	9,720
Path N block 2	4	350	1.2	420	18	7,560
Path N block 3	5	300	1.2	360	18	6,480
Path N block 4	5	300	1.2	360	18	6,480
Path S block 1	2	320	2.5	800	22	17,600
Path S block 2	3	720	1.5	1,080	18	19,440
Path S block 3	4	500	1.2	600	18	10,800
A2 welcome and notice board	2			1	1,500	1,500
Threshold sign at main entrance points	1			2	300	600
Picnic tables	2			2	700	1,400
Picnic tables	4			1	700	700
Simple bench seats	2			3	350	1,050
Simple bench seats	4			4	350	1,400
Waymarkers	2			10	30	300
Waymarkers	4			10	30	300
						<b>95,330</b>

**Table 15: recreation infrastructure costs**

### 5.7.5 Maintenance and monitoring

Maintenance of paths and other recreational infrastructure will be the responsibility of the volunteer groups (see section 5.6). The 25-year cashflow includes an annual sum equivalent to 5% of the infrastructure cost for maintenance. Regular inspections will be carried out to ensure any issues are noted and dealt with timeously. CCW will seek to install people counters to quantify recreational use of the forest. Other community woodlands have done this in conjunction with e.g. local colleges who have designed and built counters as projects.

### 5.7.6 Additional recreational projects

Additional recreation projects and infrastructure, such as mapping the forest for orienteering, and establishing a permanent orienteering course, will be taken forward through the development of the Outdoor Education Centre (see section 5.9 below) but will be available for use by the general public.

There is scope to develop a network of specialist cross country and downhill mountain bike trails: this would require significant additional development work and investment, and is discussed briefly in section 7.5 below.

<sup>48</sup> <https://www.biglotteryfund.org.uk/awardsforallscotland>

<sup>49</sup> <http://www.pathsforall.org.uk/pfa/support/community-path-grants.html>

## **5.8 Woodfuel & Wood products**

CCW seeks to use and add value to timber from Muirdrochwood to provide employment opportunities, deliver useful products locally and establish sustainable income streams to support the achievement of CCW's broader objectives.

A range of possible products have been considered, from woodfuel to sawn timber and including the sale of by-products from processing. There are a number of options available for some aspects of this plan: the configurations proposed below rely on grant support to acquire infrastructure and equipment and if this is not available at the levels needed alternative configurations will be explored.

### **5.8.1 Wood resource and potential products**

Muirdrochwood comprises primarily single species conifer forest. Once FES have finished the current felling operations there will be approximately 42,000m<sup>3</sup> of standing timber within the forest, 95% of which is Sitka spruce, the remainder comprising 1,500m<sup>3</sup> of larch, predominantly infected with *P ramorum*, and a small volume of broadleaves.

The larch volume includes ~300m<sup>3</sup> of large diameter sawlog material in the mature stand by the loch. There is approximately 800m<sup>3</sup> of other larch in this block, plus ~200m<sup>3</sup> in the small block at the eastern end of the forest. Permission to fell these stands has already been granted by FCS and would carry over to CCW on acquisition of the forest, so felling could begin immediately, without the need to complete the Long Term Forest Plan (LTFP). The remaining 200m<sup>3</sup> of larch is in scattered pockets throughout the forest, either where FES has decided not to fell or is unaware of its existence. Permission to fell these stands (whilst the trees are still alive) would need to be sought through the LTFP.

CCW's long term felling proposals anticipate the removal of almost 70,000m<sup>3</sup> from the forest over 25 years: this equates to ~2800m<sup>3</sup> per year. In the first 5 years this will include 1500m<sup>3</sup> of larch but in subsequent periods will be almost entirely Sitka spruce.

Whilst it is anticipated that the majority of this volume will be sold (probably via standing sales) into conventional external markets there is potential to retain and process some of this material to add value.

Potential products identified include:

- Wood fuel (air dried logs, wood chip and kindling) for the biomass boiler, local sales and sales in the wider community.
- Sawn timber for in-house construction e.g. of Outdoor Education Centre
- Sawn timber for sale
- Sawn timber for manufacture of goods for sale
- Wood for craft use
- Sale of waste products (sawdust, chippings, shavings) from milling and woodfuel production
- Sale of brash post harvesting

With the acquisition of appropriate machinery and skilled personnel there will also be potential to offer services (felling, chipping) off-site within the local community.

### **5.8.2 Woodfuel**

Woodfuel is widely used in this rural area which has no mains gas supply and according to survey results (see below) accounts for 50% of heating fuel. Although Galloway has a very high percentage of forest cover there is limited local supply, especially of processed firewood, and many local residents source their wood from a considerable distance, such as Dumfries – in part due to the successful Wood Fuel Cooperative<sup>50</sup> which has a base there.

Not all firewood users will be familiar with what needs to be done to manage their stock of wood once it has been delivered. CCW will also offer advice on the storage and stacking of firewood prior to use, and there is a potential additional market in the sale of firewood storage and shelters.

### **5.8.3 Assessment of demand**

A community woodfuel survey was distributed in May 2018 to the Glenkens Community Council mailing list to assess likely demand for woodfuel. The survey was also issued at the CCW community event in Lagwyne Hall on 5 October, with checks made to ensure no double-counting of previous respondents. A copy of the survey is provided at Appendix 5.

51 responses were received, all but 2 from respondents who currently burn wood. Collectively wood made up approximately 50% of their fuel use. Total woodfuel usage was reported as ~350m<sup>3</sup>. Of this the majority (~250m<sup>3</sup>) was self-harvested or bought as green lengths and processed by the user, with ~100m<sup>3</sup> bought processed.

Several respondents have access to their own woods or a regular supplier and were not interested in the possibility of buying firewood from CCW, however ~260m<sup>3</sup> of the volume was attributable to respondents who answered “yes” to the question “Please indicate whether you would consider buying firewood from Carsphairn Community Woodland”, albeit that some responses were caveated e.g. “if the price is right”.

It is estimated that the survey reached ~40% of households within the community area, however the likely sales area of a woodfuel business at Muirdrochwood extends considerably beyond the CCW area, encompassing many outlying properties to the south and east, and potentially as far as St John’s Town of Dalry, from where interest has been shown.

The potential local market for woodfuel, leaving aside those who source and burn their own wood, is therefore four or five times higher than captured by survey responses, and is estimated at >1000m<sup>3</sup> per annum, with ~400m<sup>3</sup> of this being for processed material. It is considered that the proportion of processed material may grow in future if a reliable supply is established, and as householders age and are less able to process wood themselves.

In addition to the potential domestic market, the CCW woodfuel business could supply the outdoor education centre (see section 5.9) and in the longer term the tourism accommodation and affordable housing. There is potential to convert other community buildings in Carsphairn to woodfuel use as and when their current heating systems require replacement.

Additionally, 19 respondents indicated they would be interested in buying other wood products from CCW, mostly sawn timber, wood chippings and planed timber, some sawdust and wood shavings.

### **5.8.4 Woodfuel proposals**

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<sup>50</sup> <https://www.woodfuel.coop/>

CCW will establish a woodfuel business to service the local market. The business will focus on selling air-dried wood, cut to two sizes to accommodate larger and smaller appliances and delivered in 1m<sup>3</sup> bags. Production of woodfuel (including woodchip discussed below) will be one of the main tasks of the forest worker.

Anticipated sales are 450 m<sup>3</sup> bags (equivalent to 300m<sup>3</sup> timber) and costings below are made on that basis, although it is anticipated that it may take a couple of years for sales to reach that level.

Initial setup costs are shown in the table below. Good quality second hand machinery will be sought to keep initial costs down. It is anticipated that some or all elements of setup costs will be grant-aided. Potential funders include the Climate Challenge Fund, UK Shared Prosperity Fund / LEADER replacement, CREFL (Windfarm distributor Fund). Some of the machinery will have additional uses within the forest.

Item	Cost £
Shed	7,000
Firewood processor + hydraulic log lift	8,000
Tractor with PTO & front forks	7,000
Log bags (250 @ £6/bag, vented, multi-trip)	1,500
Tools (bag loading frames, tarps, rakes/shovels etc)	1,000
C/saw & PPE (2x c/saw gear)	1,000
Forklift	4,000
Flatbed truck/Trailer with crane (see note below)	10,000
<b>Total</b>	<b>39,500</b>

**Table 16: Woodfuel setup cost**

Acquiring a truck/trailer with crane would enable a greater delivery radius. The potential market increase will be weighed against the higher cost this would bring in terms of a driver with Certificate of Professional Competence (CPC), vehicle maintenance, crane testing etc. A lower cost alternative that could operate initially would be the acquisition of a simple trailer and use of the tractor for deliveries.

Firewood needs to be dried down to around 20% moisture (water) content, otherwise it will not burn as warmly or as well as it can do. CCW will initially dry wood by stacking under open cover, allowing air to circulate, but if funds allowed would consider accelerated drying methods such as polytunnels in an open sunny location with a good through draught, or kiln drying.

Item	Unit cost	Units	#	Cost £
Timber cost to roadside	15.00	green tonne	300	4,500
Transport to stackyard	5.00	green tonne	300	1,500
Processing cost	6.00	m <sup>3</sup> bag	450	2,700
Fuel costs	1.00	m <sup>3</sup> bag	450	450
Administration	3.00	m <sup>3</sup> bag	450	1,350
Delivery - labour	7.00	m <sup>3</sup> bag	450	3,150
Delivery - transport	2.50	m <sup>3</sup> bag	450	1,125
<b>Total operating cost</b>				<b>14,775</b>
<b>Cost per bag</b>				<b>32.83</b>

**Table 17: Woodfuel operating costs**

Operating costs are shown in table 17 above. Labour costs for processing and delivery are for the Forest Worker, who may also be responsible for some motor manual harvesting (e.g. of small larch stands). The figures do not include depreciation, which is estimated at £6,650 per annum, or ~£14.78/m<sup>3</sup> bag.

The likely price point is ~£60/m<sup>3</sup> bag, giving total sales of £27,000

Small volumes of kindling wood will be produced and sold, this will bring some additional income. Small volumes of firewood will be distributed free of charge at CCW's discretion. e.g. to pensioners in fuel poverty. To keep the plan simple, the additional net income from the kindling is considered as equivalent to the additional cost of free firewood distribution.

### **5.8.5 Woodchip**

Woodchip is preferred to solid logs by some users, especially where large volumes are to be used. A biomass boiler for the OEC (coming on-stream towards the end of year 2) would be a natural customer for woodchip.

In the longer term, if affordable housing proposals are developed then this too would provide a captive market. Availability of woodchip could stimulate other potential end-users to consider installing a woodchip boiler when replacing existing equipment.

At least initially, if the OEC is the only customer for woodchip it may be more cost effective to arrange a regular hire of a machine, rather than seek to acquire a chipper. For the purposes of budgeting this plan it is estimated that 100m<sup>3</sup> a year of green timber will be chipped for fuel, and that this will be done at cost. Chipping would be carried out primarily by the Forest Worker.

### **5.8.6 Sawn Timber**

Adding value to timber by milling would be an effective way of delivering CCW's objectives to generate income and employment opportunities from the forest. Evidence from Kilfinan Community Forest suggest that a small scale milling operation can be sustainable, especially if integrated with a woodfuel business.

Felling of the remaining larch stands will provide a substantial volume (300m<sup>3</sup>) of large diameter sawlog material in the first two years, and there is a smaller volume of sawlogs in the other larch stands but once this material has been utilised production would switch to spruce, which commands a considerably lower price than larch and has a smaller range of uses without treatment.

### **5.8.7 Sawn timber for on-site construction**

Construction of the proposed Outdoor Education Centre and associated buildings in the first two years of operation provides an immediate opportunity for value added processing of the large mature larch stand.

Larch will not be preferred material for main construction of the OEC, but will be ideal for cladding. Timber requirements for the OEC have not yet been established but any surplus sawn timber from these stands could be stockpiled and used for community buildings and future developments (e.g. affordable housing and / or tourist accommodation) or sold on.

### 5.8.8 Sawn timber for manufacture

There is potential to use small volumes of sawn timber for manufacture of various items e.g. shelters, firewood stores, picnic tables and benches, bird hides, bird and bat boxes etc. This could provide a small income, and the production of items would contribute to other CCW objectives.

### 5.8.9 Sawmill proposals

CCW will establish a sawmill at Muirdrochwood, initially processing larch primarily for use on site but then moving to process spruce logs for the local market.

A site will be identified for the installation of the sawmill and appropriate infrastructure (e.g. a large shed with a part-concrete base, drying room with dehumidifier) and equipment (e.g. electric wood-mizer (portable sawmill), generator and 4-side planer) acquired.

Indicative set up costs for the sawmill operation are contained in table 18 below. Good quality second hand equipment will be sought to keep initial setup costs down. Various alternative configurations are possible, but have been ruled out on grounds of cost (e.g. acquisition of a pressure treatment plant). The sawmill would also use some other machinery acquired for the woodfuel business (forklift, tractor).

Item	Cost
Site clearance	5,000
Shed, part concrete floor	20,000
Drying room w. dehumidifier	5,000
Woodmizer LT20 Electric	15,000
4 sided planer	6,000
Other equipment & tools	5,000
Generator	4,000
<b>Total</b>	<b>60,000</b>

**Table 18: Sawmill set-up costs**

Grant aid from a range of sources will be available for elements of the set-up costs, from e.g. South of Scotland Enterprise Agency, UK Shared Prosperity Fund / LEADER replacement, CREFL (Windfarm Distributor Fund).

In the first few years of operation the mill will be processing larch logs. Production for the OEC and associated buildings will be at cost, but off-site sales of larch cladding should generate significant income.

Item	Cost
Timber cost 100t @ £20/t	2,000
Labour (forest worker)	10,000
Administration	1,000
Fuel / power	1,000
Repairs	1,000
Depreciation	9,000
Loss of sawlog income	4,500
<b>Total</b>	<b>28,500</b>

**Table 19: Sawmill operating costs**

Long term operating costs are shown in Table 19 above and assume an annual through-put of 100m<sup>3</sup> of spruce logs; this is considered the minimum throughput to guarantee profitability. It is anticipated that the Forest Worker will be the primary operator of the sawmill, although it is possible that this role could be two part-time jobs <sup>51</sup>.

Processing 100m<sup>3</sup> of round timber would produce approx. 50m<sup>3</sup> of sawn timber with a sale value of £30,000, plus volumes of sawdust and slabwood which would contribute some additional income (estimate £1,500).

#### **5.8.10 Wood for craft use**

Small volumes of timber could be harvested from existing broadleaved stands and in future years from newly planted broadleaved areas managed as coppice for carving, turning, etc by community volunteers, e.g. through a Men's Shed.

This might generate a small positive income, however because of the level of uncertainty this has not been included in overall cashflows.

#### **5.8.11 By-products**

Local markets have been identified for a range of by-products from processing (sawdust, wood chippings) and harvesting (brash)

##### **5.8.11.1 Sawdust, shavings, woodchip**

Enquiries made locally to Muirdrochwood have established a market for sawdust from a local haulage contractor who uses a 20 tonne load per month for about 8 months a year and would be keen to source it locally if it was available at a competitive price (currently £120/t).

Other waste products such as planings, and shavings/wood chip are similarly in demand by local contractors. Prices range according to condition such as £40/tonne straight from the ground/mill up to £120/tonne dried. The latter would obviously also incur some drying costs.

##### **5.8.11.2 Brash**

A market has been identified with a local contractor who will pay £1-5/tonne dependent on site. The contractor takes it straight from the ground and as Muirdrochwood is well serviced with roads this should be a straight forward operation, which will have additional benefits in promoting natural regeneration and facilitating replanting.

The volume of brash varies according to species. Conservative estimates are 30 tonne/ha for spruce, 10 tonne/ha for larch. The 2018 FES felling covers ~86ha (38ha spruce, 48 ha larch) and thus can be expected to generate ~1620t of brash, worth £4,860 at a mid-price of £3/t. Smaller but still useful sums would be available from future fellings.

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<sup>51</sup> Experience from Kilfinan suggests the sawmill would be busiest in summer, whilst woodfuel demand is strongest in winter, so the two roles are complementary.

## **5.9 Outdoor Education Centre**

A key element of CCW's plans to develop the forest as a rural development hub is the establishment of an Outdoor Education Centre (OEC), to be located in the southern block, adjacent to the existing road access and car park / turning area at NX614903. A more detailed outline of proposals for the Outdoor Education Centre is contained in the CCW Outdoor Education Centre Project Outline Plan.

The location of the forest, with its loch and river frontage, quarries and extensive woodland allows for a wide range of outdoor activities to be offered. The OEC will be aimed principally at schools, who will be invited to send groups for week long stays, participating in a range of activities proven to have significant achievements in respect of aspects such as gaining confidence, team work and developmental skills, all aimed at addressing Curriculum for Excellence capacities. 5% of places overall will be offered free to disadvantaged pupils. Out-with school attendance the Centre will be open to other parties and locals, the latter benefiting from discounted membership costs. All facilities will be multi use and almost all activities will be able to be experienced by those with various learning or physical special needs.

The Centre will be a significant new resource for the community, providing:

- Local employment (direct and sessional staff): 10 posts equating to 6.5 FTE
- Additional income from visitors for other local businesses (shop, B&B etc)
- Increased provision of outdoor activities for local community and visitors
- Income for CCW to support other activities in the forest

In the longer term the Centre will contribute to increasing levels of health and fitness in the community and will help the area to increase recognition as a tourist destination.

### **5.9.1 Governance**

CCW will establish a wholly-owned trading subsidiary to take on the operation of the Outdoor Education Centre. The best structure is yet to be determined but will likely be a Company limited by shares, with a small board including nominees from CCW and those with expertise in the field.

For simplicity this subsidiary is referred to as Carsphairn Outdoor Education Ltd (COE), although this name has not been formally agreed. The most likely model is that CCW will develop and own the site, whilst COE will be responsible for all aspects of the management of the business, including the employment of staff. COE will pay an agreed annual rent to CCW and have the capacity to gift aid surpluses to the parent, although it is anticipated that in the first few years of operation any surpluses will be retained to reinvest and develop the business. COE will join the appropriate industry bodies and seek all necessary licences and permissions to operate.

### **5.9.2 Funding and Development process**

Primary funding for the Outdoor Education Centre will be sought from the Big Lottery Fund Community Assets Fund<sup>52</sup>. Additional funding will be sought from charitable trusts, Friends Provident Foundation<sup>53</sup>, etc. Development funding is available through Community Assets. This can be used to cover costs such as options appraisals, surveys, community consultation and strategic plan development as well as costs to engage a design team to take forward the technical aspects of the application.

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<sup>52</sup> <https://www.biglotteryfund.org.uk/funding/programmes/community-assets>

<sup>53</sup> <https://www.friendsprovidentfoundation.org/grants/our-approach-to-funding/>



## **6 Development projects for phase 2**

A large range of project ideas were suggested and appraised during the development of this plan. This section briefly discusses two potential projects which would make a substantial contribution to delivering CCW's objectives and which will be investigated and if at all possible taken forward in a second phase. (i.e. years 6-10).

### **6.1 Affordable housing**

The Carsphairn Community Future Plan identified the need for more affordable housing to encourage young families to settle in the area, and there is potential to develop housing within the forest, subject to the planning authority approving proposals for new housing outwith areas identified in the Local Development Plan.

The need to provide road access, services, etc. will limit the potential sites, which will also be constrained by the need for ground conditions suitable for building and suitable drainage. The most likely site for affordable housing provision appears to be in the South-eastern block of the forest, adjacent to the B729 / B7000, in the area currently occupied by birch and Sitka regeneration (see map below).

Development of housing requires significant investment and would be taken forward in partnership with a local housing association, e.g. Dumfries and Galloway Housing Partnership or Loreburn Housing Association. CCW could contribute timber for construction and supply biomass for heating.

### **6.2 Tourist accommodation**

The development of tourist accommodation in the forest would help deliver a number of CCW's objectives, including providing a sustainable income stream and providing employment (through cleaning, management and maintenance). Moderate investment is required but there is potential for good returns. There would also be wider economic benefits associated with increased spend in the local community.

A range of accommodation types has been suggested, including yurts, glamping pods and chalets. More work is required to determine the target market and preferred accommodation type.

Road access and parking will be required (but not necessarily adjacent to units). Even if electricity is not available provision for sanitation will be required (e.g. compost toilets). There are differences between types of accommodation, e.g. chalets require a higher level of access provision and servicing, which places tighter restrictions on location.

An area in the South-eastern block, adjacent to the river, has been tentatively identified as suitable for visitor accommodation (see map below). The extent and type of land required depends on type of accommodation and experience being provided (with consideration to appropriate separation between units): different market segments will have different expectations.

## **7 Other potential projects**

The sections below outline a number of other project ideas which were suggested during the development of this plan and could contribute to CCW's objectives.

### **7.1 Huts**

There is increasing interest in hutting as evidenced by the Thousand Huts campaign<sup>54</sup>. As of July 2017 huts have a much lighter regulatory burden in terms of how they are constructed, and in many cases may not require any building warrant at all.

Broadly speaking, hutters might expect a more remote location and a greater separation between units than the other accommodation types, so potential hutting sites are likely to be in the main (northern) forest block. Depending on the model chosen provision of hut sites would require limited investment and has the potential for modest returns

### **7.2 Woodland / green burials and/or memorial woodland**

There is increasing interest nationally in woodland and green burial sites and a number of community woodland groups have developed or are taking forward proposals. Such a project requires moderate investment and some ongoing management costs but potentially valuable returns so could contribute useful to developing a sustainable income from the forest

Woodland / green burial sites require relatively small areas of land but can be quite demanding in terms of site conditions (regulated by SEPA): they must have suitable depth of well-drained soil and be a certain distance from watercourses. They are typically established on bare ground or restock sites, rather than mature woodland. Planning authorities can add additional requirements around vehicle access, parking, etc. Picturesque sites with a good view can demand a premium.

If a suitable site for interments cannot be found it would be possible to focus on cremation burials, which are considered to present a lesser risk to the water environment, and subsequently face fewer restrictions.

A related possibility is the designation of an area for the planting of memorial trees, where people would pay to have a tree planted in memory of a loved one, providing a peaceful area for reminiscence, away from other activities and more used areas but easily accessible and with a tranquil outlook over hills or loch. Guidelines on e.g. symbols on trees, daffodils and other bulbs would be provided to retain a natural area.

### **7.3 Non-timber forest products**

Installation of a polytunnel and community growing area would deliver various CCWs objectives, including income generation and increasing social activities. A range of non-timber forest products could be sourced from the site: e.g. fruits and berries, fungi, willow (for basket making).

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<sup>54</sup> <http://www.thousandhuts.org/>

A small tree nursery providing stock for the forest and other local markets would be possible and could be a valuable engagement tool as a focus for educational and inclusion activities.

#### **7.4 Rural Skills training**

There is potential to develop a business selling training opportunities in a range of rural skills. Further work is required to assess the potential market and determine whether to focus on forest / land management (e.g. tree felling, path building and in particular deer management) skills aimed at increasing employability etc. or on historic skills (pole lathe carving, hurdle making, etc.) aimed at hobbyists and the leisure market.

Provision of training activities requires a certain level of infrastructure: shelter, servicing (water, toilets). Again, the requirements will vary between customer groups - a higher level of infrastructure provision will increase the range of markets.

#### **7.5 Mountain biking**

There is scope to develop a network of specialist cross country and downhill mountain bike trails at Muirdrochwood. There has been substantial growth in mountain biking across Scotland in the last 20 years and development of trail would contribute to CCW objectives by increasing recreational use of the forest and enhancing the offer of the OEC.

Multi-grade trails require significant investment and usage can be difficult to monetise: income from car parking and uplift, bike hire/repair and cafes are possible. South Scotland is already well catered for with the 7 Stanes network<sup>55</sup> so considerable development work would be required to confirm that there was sufficient demand and to produce a robust business case for investment.

#### **7.6 Health initiatives**

There are opportunities to develop a business delivering health-focussed woodland activities for a range of client groups: young people excluded from school, those with mental health issues, or undergoing rehabilitation from substance abuse etc. Abriachan Forest Trust<sup>56</sup> has pioneered learning and employability programmes – with adult and youth education, skills for work, mental health support, criminal justice support and volunteering, and with funding from a range of sources including service contracts with the NHS and Local Authority. Directors of CCW have visited this site and been impressed with its set up and success.

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<sup>55</sup> <https://scotland.forestry.gov.uk/activities/mountain-biking/7stanes>

<sup>56</sup> <http://www.abriachan.org.uk/>

## 8 Assessment of public benefits and justification of discount

Community acquisition, management and development of Muirdrochwood will deliver wide-ranging public benefits. This section of the plan attempts to quantify and monetise these benefits for the purposes of justifying the discount requested from Forest Enterprise Scotland. This is not always straightforward.

Only benefits arising in the first five years of community ownership have been quantified, and benefits which arise directly as a result of public funding (e.g. a job dependent on revenue grant funding) have not been included. Some categories of benefits are very difficult to quantify or monetise, and these have also been disregarded in the calculations. Where estimates have been necessary conservative figures have been used.

Four categories of benefit have been quantified:

- Public recreation
- Direct employment
- Free places at the OEC
- Community volunteering

### 8.1 Recreation

As noted previously there is no provision or promotion of recreation at Muirdrochwood and current recreational use of forest is minimal: the baseline is effectively zero. CCW intend to invest in recreation infrastructure at Muirdrochwood, which is well placed along the Glenkens valley tourist route and close to the Southern Upland way, with no comparable recreation opportunities nearby.

Evidence from other community woodlands suggests that community ownership and management can significantly boost visitor numbers, e.g. at Dunnet Forest which now receives >60,000 visits per year. Estimates for Muirdrochwood, which is further removed from centres of population, are considerably more modest, but it is anticipated that visitor numbers will grow to 5-6,000 per year (not including pupils at the Outdoor Education Centre). A significant number of these visits will be “displaced” from elsewhere and will not be additional, so CCW have taken a very conservative estimate of additional recreational visits at 1,000 per annum.

There has been a large number of studies over the last 30 years attempting to provide monetary values for recreational visits, producing greatly varying values per visit.

The FES annual accounts for 2017/18<sup>57</sup> show that FES spent £13,909,000 on Communities, Recreation and Tourism, predominantly from Scottish Government grant aid. No further breakdown of these figures is provided in the accounts, however the Community Engagement Health Check (2014) reported that only a small proportion of this expenditure (<20%) was on community development and skills training with the majority – at least £10M if this breakdown has been maintained - being on recreation and tourism.

The accounts state that the National Forest Estate has over 10 million recreational visits a year, which suggests that an approximate value of £1 per visit should be applied. Note that there is no

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<sup>57</sup> <https://scotland.forestry.gov.uk/images/corporate/pdf/Forest-Enterprise-Scotland-Annual-Report-and-Accounts-2017-2018.pdf>

calculation of displacement in the FES visitor count, so the actual cost of additional visits will be substantially higher.

## **8.2 Direct employment**

Community ownership and management of the forest will create jobs, both directly and indirectly e.g. through contractor opportunities in the construction of the Outdoor Education Centre. By Year 5 there will be 12 posts (=8.5 FTE) in the forest.

The Community Forest Manager post is intended to be mainly funded for the first five years by revenue grants from various sources: these are likely to be public funds and therefore this post has been excluded from the calculations. Likewise indirect employment through OEC construction will be primarily public funded and has been excluded from calculation.

The Forest Worker post will be funded primarily through the woodfuel and wood products business, whilst the various jobs at the Outdoor Education Centre will be sustained by the income generated from customers. All these roles are new and additional: gross salaries and associated costs have been used as the basis for calculation.

## **8.3 Free places at the OEC**

There are a great many benefits to outdoor education<sup>58</sup>, many of which accrue to society at large as well as individual beneficiaries. To help widen access to outdoor education and to help ensure that financial hurdles are reduced, CCW has committed that 5% of places through the year will be available for free for disadvantaged children. The cash value of these free places has been used as the basis for calculation.

## **8.4 Community volunteering**

Volunteering delivers a range of benefits, to the individual, to the beneficiary/host, and to society at large e.g. through the reduced societal costs arising from improved mental and physical health and social cohesion.

There have been several attempts to quantify these various aspects. The economic value volunteering was quantified by the ONS report<sup>59</sup> which estimated the output value of voluntary activity in the UK in 2012 as £23.9bn, whilst the DWP and Cabinet Office estimated that the wellbeing value to frequent formal volunteers themselves is around £70bn<sup>60</sup>. Andrew G Haldane, Chief Economist, Bank of England has suggested<sup>61</sup> that the social value of volunteering may be at least twice that of other economic or private value.

For the purpose of this calculation we have taken the very conservative view that the social value is 20% (i.e. a tenth of the level suggested by Andrew Haldane) of the economic value, for which we have used the real living wage (£8.75). Thus a 6 hour day has an approximate economic value of £50, and a social value of £10.

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<sup>58</sup> See the OEC outline project plan for detailed analysis

<sup>59</sup> <http://webarchive.nationalarchives.gov.uk/20160107021131/http://www.ons.gov.uk/ons/rel/wellbeing/household-satellite-accounts/valuing-voluntary-activity-in-the-uk/art--valuing-voluntary-activity-in-the-uk.html>

<sup>60</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/221227/WPI12.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/221227/WPI12.pdf)

<sup>61</sup> <https://www.bankofengland.co.uk/-/media/boe/files/speech/2014/in-giving-how-much-do-we-receive-the-social-value-of-volunteering.pdf>

Volunteer development is a key element of CCW's plans for the forest, with investment in infrastructure and promotion of opportunities. Again, a very modest estimate of work days has been used, starting at 60 days in Year 1 (equivalent to 5 individuals in a monthly work party) rising progressively to 100 days in Year 5

	year 1	year 2	year 3	year 4	year 5	total
Recreation	1,000	1,000	1,000	1,000	1,000	5,000
Direct Jobs - Forest Worker	10,000	20,000	20,000	20,000	20,000	90,000
Direct Jobs - OEC staff	0	9,860	112,548	126,727	130,974	380,109
Free places at OEC			11,520	14,400	17,280	43,200
Community volunteering	600	700	800	900	1,000	4,000
Total						<b>522,309</b>

Note:

Recreation @ £1 per additional visit (small proportion of actual visitors)

Jobs @ gross salary etc

Free places @ cash value

Volunteering @ £10/day

The total value of additional public benefit accruing over 5 years from these categories of benefit is estimated at £522,309, and the discount sought, £250,000 – is just under half this figure.

### 8.5 Other unquantified public benefits

A range of other public benefits will accrue from CCW ownership, management and development of Muirdrochwood, but have not been quantified for a range of methodological and other reasons.

These include:

- Social benefits arising from additional paid provision of outdoor education at OEC
- Social benefits arising from establishment of a Men's Shed (not included as development is aspirational at this stage)
- Woodfuel supply reducing CO2 emissions
- Biodiversity improvement from increased broadleaves
- Public benefits from future projects such as affordable housing beyond the first five years.

Similarly, a range of possible disbenefits have been considered, none were thought to have a significant impact.

- There will be very little change to FES management input which pre *P ramorum* was minimal (and the site has in any case been notified for disposal).
- 5 yearly harvesting operations will be carried out by private sectors contractors (as would be the case if forest is sold on open market) so there will be no change.
- A relatively small volume of wood (500m<sup>3</sup>) will be retained for local processing annually, this will have a negligible impact on hauliers and downstream processors (and will have positive effect in reducing the number of timber lorry journeys).
- Use of volunteer labour may reduce opportunities for contract planters (however there is no way of knowing how a future private sector owner will carry out restocking – they might rely entirely on regeneration).

## **9 CCW 25 Year Cashflow**

A twenty-five year cashflow has been prepared and is supplied as a separate pdf document. This draws information from the budget tables for the individual workstreams and projects detailed in section 5 above.

The loss of a third of the standing crop and the very significant restocking obligation to be borne by CCW cause significant budget pressures in the short-term, however the suite of development projects proposed will ensure long term financial sustainability and generate income for reinvestment in community management and development of the forest.

Year 0 is the acquisition process.

The construction and establishment of the Outdoor Education Centre are included, but not the running costs and income as these will be the province of the trading subsidiary set up to manage the centre – these projections are included in the Outline Project Plan for the Centre. The trading subsidiary will pay an annual rent from year 3 and this is included in the cashflow.

Future development projects intended for year 6 and beyond, such as affordable housing, tourist accommodation, etc, have not been included. These and other future projects will be taken forward if feasible and financially sustainable.

Inevitably the further into the future projections are made, the more speculative and less reliable they become, nonetheless they demonstrate the reasonable expectation of sustainability for a period of 25 years.



## 10 Workplan and major milestones

WS	Task	When	Who
1	Establish new community body	June 2018	Board
1	FES CATS process		Board
1	Submit application to Scottish Land Fund	On CATS approval	Board
1	Additional fundraising	Prior to acquisition	Board
1	Appoint legal advisors	Prior to acquisition	Board
2	Obtain Public Liability insurance and Employers Liability insurance	By acquisition date	Board
2	Prepare and submit annual accounts & OSCR annual return	Annually, on-going	Treasurer
2	Maintain communications with membership and wider community	Ongoing	Communications Officer
2	Prepare and maintain risk assessments	Starting Year 1	CFM, Safety Officer
3	Identify & secure office space	On acquisition	Board
3	Recruit for CFM	On acquisition	Board
3	Recruit for Forest Worker	Year 1	Board, CFM
4	Register CCW with SG RPID	On acquisition	Board
4	Register Muirdrochwood with SG RPID	On acquisition	Board
4	Apply for FGS LTFP preparation grant	On acquisition	Board / CFM
4	Complete LTFP	On acquisition	CFM
5	Apply for FGS grants if available	Once plan approved	CFM
5	Implement LTFP	Once approved	Contractors, CFM
5	Deer management	From Year 1	CCW Director
5	Restocking	From Year 3	CFM, FW, volunteers
5	Larch felling	Year 1	Contractors
5	First tranche of spruce felling	Year 5	Contractors
6	Volunteer development - funding	Year 1	CFM, Board
6	Volunteer infrastructure & tools	Year 1	CFM, FW
6	Promoting volunteer opportunities	Starting Year 1	CFM, Comms Officer
7	Path creation	Starting Year 1	CFM & contractors
7	Signage	Starting Year 2	CFM & contractors
7	Interpretation	Starting Year 2	CFM & contractors
7	Maintenance of recreational facilities	Starting Year 1	CFM, volunteers
8	Woodfuel – funding	Year 1	CFM, Board
8	Woodfuel – equipment	Year 1	CFM, Board
8	Sawmill - funding	Year 1	CFM, Board
8	Sawmill - equipment	Year 1	CFM, Board
9	OEC Community Assets stage 1	Year 1	Board
9	OEC Development process	Year 1	Board, Design Team
9	OEC trading subsidiary established	Year 1	Board
9	OEC Community Assets stage 2	Year 1	Board
9	Match funding sought	Year 2	Board
9	OEC Construction	Year 2	Board
9	OEC staff recruitment	Year 2 onwards	Board
9	OEC promotion and marketing	Year 2 onwards	Board, Centre staff

NB: Numbers in LH column refer to workstreams.

CATS	Community Asset Transfer Scheme
CFM	Community Forest Manager
FCS CF	Forestry Commission Scotland Community Fund
FES	Forest Enterprise Scotland
FGS	Forestry Grant Scheme
FW	Forest Worker
LTFP	Long Term Forest Plan
OEC	Outdoor Education Centre
OSCR	Office of the Scottish Charity Regulator
PPE	Personal Protective Equipment
SG RPID	Scottish Government Rural Payments and Inspections Division
SLF	Scottish Land Fund

## 11 Monitoring and evaluation

CCW will monitor and evaluate progress in delivering desired outcomes in a variety of ways:

- Reports to funders;
- Preparation of annual accounts and report to OSCR;
- Recording key outputs from work in the forest:

Key outputs and indicators are presented in the table below.

<b>Output / outcome</b>	<b>Indicators</b>
Employment	# jobs created
Volunteering	# volunteer days
Woodfuel	Volume sales
Milling	Volume production
Value added	Net income from sales
Biodiversity	# ha restocked with broadleaves
Education	# students at OEC
Inclusion	# free places at OEC
Community cohesion	# events and activities in forest
Recreation	#m paths created
Health	# recreational visits

**Table 20: Outputs and indicators**

CCW will encourage comments on the organisation's Facebook page and use a range of opportunities such as volunteer days, fundraising events and the AGM to secure feedback and ensure that CCW's activities and objectives remain aligned with the aspirations of the members and the wider community.

## 12 Analysis of major risks

<b>Risk</b>	<b>Likelihood</b>	<b>Impact</b>	<b>Mitigation</b>
FES refuse Asset Transfer request	Low / Medium	Project cannot proceed <sup>62</sup>	High quality application
FES offer lower discount than requested	Medium-High	CCW seek additional match funding for acquisition	Good justification of discount.
Funding bid to SLF unsuccessful	Medium	Project v unlikely to proceed	High quality application
Community unable to raise match funding for acquisition	Medium	Project v unlikely to proceed	Robust fundraising plan and implementation
Significant fall in timber prices	Low	Reduced income for CCW	Flexibility in harvesting plans
Issues with neighbouring householders / landowners	Low	Delays, changes to plans, loss of community support	Maintain good communications, sensitive management.
Severe windblow in woodland	Low/ Medium	Reduced income, potential impact on amenity and other projects	Careful management, flexibility if needed
Lack of community involvement / volunteers	Low/ Medium	Delays in implementation, lack of community commitment or buy-in	Active communications and promotion of opportunities
Lack of capacity within group / loss of key individuals	Low/ Medium	Delays in implementation, management failures	Robust governance systems, wider networking and support
Funding bids for development projects unsuccessful	Medium	Delays, projects unable to proceed	Good quality applications, flexibility
P ramorum infection in remaining larch stands	High	Felling required, loss of income, amenity etc	Flexibility, local markets for timber, sawmill establishment to add value

<sup>62</sup> NB it is possible to seek a review of the decision or to resubmit an amended request

## **Appendix I Galloway and Southern Ayrshire Biosphere Supporters Charter CCW Sign-up information**

Describe how you or your school, community, business or organisation meets or intends to meet the following principles of the Biosphere Charter.

### **1. Help to conserve the natural resources of the Biosphere:**

We aim to manage our woodland in a sustainable manner and to diversify the structure of the woodland in order to enhance its benefit to the environment, wildlife and people. This will ensure the resources within the woodland are regenerated by careful replanting using a mixture of appropriate native species to help increase native woodland within the Biosphere and mixed conifers to ensure wood products will be available to future generations and to help conserve species such as High Focus Red squirrel.

### **2. Support the economy to benefit local people and nature**

A driving force for CCWL is to help regenerate the Carsphairn area by increasing sustainable employment through woodland management, Community woodland enterprises and activities, outdoor education activities and increased visitor attraction, all carried out in a sustainable manner to ensure the environment is at the heart of all activities.

### **3. Promote cultural heritage and local products**

The woodland will be developed as a hub for woodland activities and products, assisting local craft production and increasing awareness of the local heritage such as the old farm stead

### **4. Contribute to the health and wellbeing of the community**

An integral part of the running of CCWL will be enhancing access and enjoyment of the local woodland by creating a series of path networks through the forest and linking with existing core paths, providing open areas for recreation, areas for outdoor woodland activity and establishing community groups to assist locals and visitors in accessing and enjoying the woodland area.

### **5. Develop knowledge, understanding and promote research**

Courses and workshops will be held in rural skills, crafts and local history as part of the development of the community woodland, to help enhance an understanding of the local environment, history and rural activities.

### **6. Raise awareness of the Galloway and Southern Ayrshire Biosphere**

The fact that the woodland lies within the Biosphere, the reasons the area is a Biosphere and what it has to offer will be included in promotional literature, information about the woodland, educational brochures etc

## **Appendix 2 CCW Open Day at Lagwyne Hall 5 October 2018**

Invitations were sent to all known addresses within the Community Area, along with a summary of the project. This information was also emailed out to all the Glenkens Community Councils via Stewartry Council of Voluntary Services (SCVS), along with a number of organisations and individuals who it was thought might be interested in learning about the project, such as local schools and community groups, local Forestry staff, environmental NGOs, Politicians and Council Members. The invitation was also advertised on the Carsphairn and CCW website and posters put up in shops, garages, noticeboards etc in Carsphairn, New Galloway and Dalry. The Galloway Glens project kindly put it on their website, along with some photos after attending.

The event featured:

- Display Boards described the development of the project from initial approach by FES through forming CCW and plans for the future development and how this may positively impact the local community, including what the outdoor education centre is planning to undertake, along with how such a centre can provide a range of benefits to pupils.
- A range of excellent photos taken of the forest by a keen amateur photographer member were included to help give an impression of the forest as it is now, including the special areas within it such as around the High Bridge of Ken and the loch frontage.
- Sticky notes (trees and speech bubbles!) were available for comments and ideas.
- The Galloway and Southern Ayrshire Biosphere Supporters Certificate was displayed along with our sign-up pledge, demonstrating our aims of sustainable development.
- A selection of potted trees and branches were included with the opportunity of matching tree names with the plants, adding a touch of woodland to the hall!
- A selection of photos were included from our Community Learning Exchange Visit to Kilfinan Community Forest, along with a presentation by and a video by Making Local Woods Work of the development at Knoydart.
- A Hedgehog box (made by a member for another member who rescues hedgehogs), was used to house the survey forms. Membership forms, Supporters and skills sheets were also available and a cotton bag with the Carsphairn Community Woodland logo on was supplied to each member in the hope that its use will encourage others to find out about the project.

The Lagwyne hall was booked from 12 noon until 8pm, the event being open between 1pm and 7pm. There was a constant flow of people attending the event and a great deal of interest was shown in the project as evidenced by comments on the supporters sheets (attached), a number of whom pledged to send a letter of support and were keen to become involved, some through participation by their own local project (Red squirrels), some being keen to find a local, reliable supply of woodfuel.

### **Statistics**

- 58 people visited the open day.
- Nine of the ten Directors attended through the day
- 12 Skills sheet filled out, with a range of interests and skills wanted
- 14 new members, taking total to 41 as at 29<sup>th</sup> Oct 2018
- 16 supporters – all but two residing locally but out-with the Community Area and interested in becoming involved, some seeking wood fuel supply, three with Red squirrel interest, others just generally supportive. Two supporters were from Fife and appreciated how the project could be a positive for the community. One was the Mobile sawmill owner who is already in

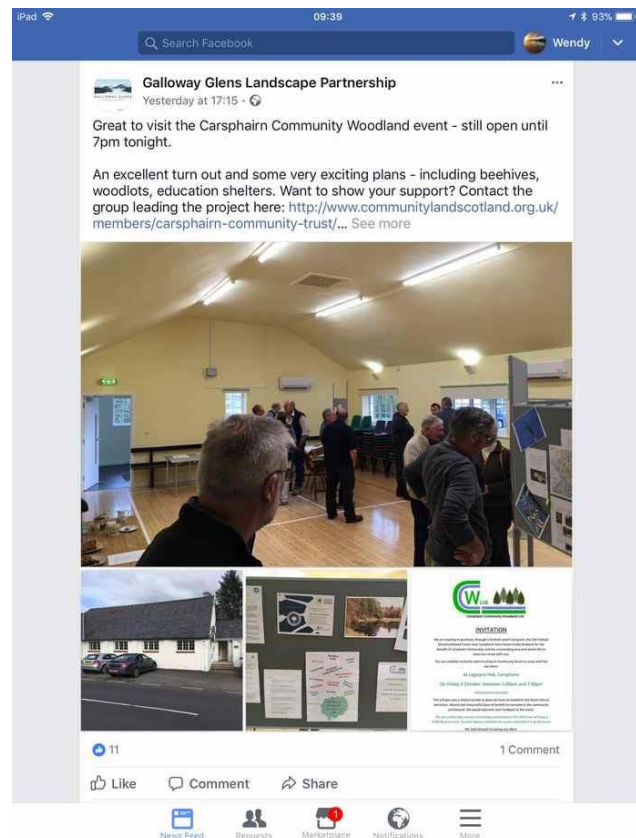
touch with the Directors and is happy to provide advice and lend his skills. His might be a suitable mobile mill to use for hire at start up and discussions are ongoing with him.





## Examples of comments received at the event.

- Brilliant idea
- Excellent idea
- Sounds great, very enterprising
- Will arrange a letter from MCS Trustees
- A really welcome project to sustain the local community!
- Great project. Plenty of folk in Dalry would be interested in buying woodfuel. Will arrange letter at next meeting
- Exciting project. Deserves to succeed
- Great idea. I hope it happens. Meanwhile Well done
- Would be a real asset for the area. Good luck!
- Very good idea, will help the area to being people in
- Glemhath! (Very good!)



## Appendix 3 Director Biographies

- **Alison Bradley**

Alison started her working life on her brother-in-law's farm in Northumberland, helping with the rearing of calves and sheep. She moved on to train as a microbiology technician at Newcastle Upon Tyne University, but after twenty years of being stuck in traffic jams twice a day decided on a complete change of career and went back to education to train in horticulture. She then set up her own gardening business and retired two years ago, moving to this area to enjoy the peace and quiet and indulge her love of flora and fauna.

- **Patricia Brander**

With a BSC in zoology with marine zoology, she has taught biology and environmental science in schools and adult education. She was a youth leader and has written environmental education activity packs for the Woodcraft Folk for young people aged 9-16 and written and edited publications on environmental and intercultural education and Human Rights education with young people. The family home in Carsphairn has been owned over 50 years and she is involved in CCW because she believes it has the potential to be a wonderful resource for people to enjoy the special countryside in this part of the Glenkens.

- **Darren Challis**

Darren Challis is a software engineer working in the financial sector. Darren is the Secretary of Carsphairn Community Trust, a Director of Carsphairn Renewable Energy Limited and Treasurer of Carsphairn Community Council.

- **Tony Challis**

Retired and a resident of Carsphairn since 2011. A former IT practitioner in builders' merchants, mutual funds, apparel and food retailing businesses, he is Ex Treasurer of a Scout group and ex Correspondence Secretary of Carsphairn Community Council.

- **Steve Cowley (Chair)**

Steve has been in the building trade all his working life and has owned and run a successful electrical contracting business for the last 37 years. He is the current Chair of The Carsphairn Community Trust and a Director on 2 other local community organisations.

- **Wendy Fenton, ACIEEM (Secretary)**

Wendy has lived locally for over 30 years, largely on smallholdings. For much of that time she has been involved in habitat conservation and enhancement as a farm conservation adviser, with experience in setting up and running a range of rural projects. She is ex Minutes Secretary of Carsphairn Community Council.

- **Derek Harris**

Derek spent 12 years as a general builder and subsequently built his house. For the last 14 years he has worked in education, including leading adventure trips to the Ardeche, which provided him with a wealth of knowledge in the needs of our young people and the benefits residential outdoor education provides. He is a qualified health and fitness instructor, has RYA Level 5 in sailing and a padi rescue diver certification. He also has a Prince 2 (project management), a BSc in Computer Engineering and a PGDE in education. He is currently undertaking his masters qualification in professional education. His interests include kayaking, sailing, skiing, snowboarding, freediving, horse riding.

- **Davey McMillan (Vice-Chair)**

Born locally, Davey has worked in farming and forestry in southern Scotland for 40 years. He has experience of organising and running local, national and international events and has long-term involvement in Carsphairn community organisations.

- **Andrew Metcalf (Treasurer)**

Andrew was born on a farm near Kirkby Lonsdale in Cumbria. He was employed as an apprentice electrician before he joined the Army. He was discharged due to injuries sustained in a motor cycle accident. He married Jane in 2005 and moved to the Glenkens in 2007 where he is involved with many charitable organisations. He is Councillor of Carsphairn Community Council, Director & treasurer of Carsphairn Community Trust, Director & treasurer of CCW, a Director of Carsphairn Renewable Energy Fund Ltd and is also on the Board of the IT Centre in Castle Douglas and a Director of the Stewartry Council of Voluntary Services.

- **Jane Metcalf**

Jane was born in Sale Cheshire. She trained as a nurse at King's College Hospital London and worked in the NHS for 24 years, in intensive care and theatres. During this time she brought up her daughter as a single parent. In 2005 she married Andrew and moved to the Glenkens in 2007, where she is a chicken farmer. Her other interests include volunteering for the Carsphairn Heritage Centre.

## Appendix 4 Community Forest Manager Draft Job Description

### Carsphairn Community Woodland Ltd Community Forest Manager – Job Description

Carsphairn Community Woodland Ltd (CCW) is a Company Limited by Guarantee (SC591976) incorporated on 20 March 2018 and a registered charity from XXXX<sup>63</sup> with a volunteer Board of Directors elected by a community membership of XXXX.

CCW acquired 324 ha of woodland at Muirdrochwood in XXXX, and are seeking to appoint a Community Forest Manager to manage the site, implement the CCW Business Plan and develop the long-term sustainability of the woodland as a community asset.

We require a person with demonstrable experience in forest management, a good understanding of business development, excellent general organisational and management skills, a good attention to detail and a talent at problem solving. Excellent communication skills and an ability to motivate and inspire others with a commitment to development at a local level are also required.

The key responsibilities of role will include:

- completing the Long Term Forest Plan and associated funding applications, and then implementing the plan;
- promoting and coordinating community involvement in the management of Muirdrochwood, and developing Muirdrochwood as a venue for community volunteering.
- overseeing and line-managing the Carsphairn Forest Worker
- tendering for and managing external contractors and coordinating sales of timber and firewood
- developing future projects e.g. tourism accommodation facilities, affordable housing and an outdoor education centre

### **Person Specification**

#### ***Essential:***

- Experience of woodland management and forestry operations.
- Experience of woodland management planning
- Experience of developing and submitting funding applications
- Experience of project development and management
- A good understanding of business development
- Good line management and supervisory skills.
- Good communication skills – written and oral.
- Experience of working with and leading volunteers
- Ability to work as part of a team or under own initiative - job requires a willingness to take on responsibilities, challenges and be self-motivated.
- Time management - ability to managing own time and the time of others, ensure jobs are completed within specified time frames.
- Intermediate IT skills – ability to document & record information in written or electronic formats - maintaining clear and concise team, H&S and site records.
- Good record keeping skills

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<sup>63</sup> Items in red to be completed when dates etc known

- Applicants need to be motivated, physically fit and able to work hard out of doors in all weathers and be involved in a range of physical tasks.
- Current and valid tetanus vaccination required.

### **Preferred**

- Experience in working with timber and wood fuel.
- Experience developing a new business and employee management.
- Knowledge of cartography and Forest Design Plans.
- Experience of using chainsaws and relevant qualifications.
- Monitoring and controlling site resources.
- Current First Aid or Outdoors First Aid certificate.

### **Desirable attributes**

- Passionate about the environment.
- Demonstrable experience in community driven sustainable development.
- Clean driving licence.

### **Terms and Conditions**

- This is a **XXXX** year contract, there will be a 6 month probationary period, and performance will be subject to regular review.
- The Community Forest Manager will be expected to work from the CCW office **at XXXX**. On-line computing facilities will be provided. A significant amount of the post holder's time will be spent in the woodland.
- The Community Forest Manager will be directly responsible to the Board of Directors of CCW. Line Management will be undertaken by one of the Directors
- The working week comprises a minimum of 37.5 hours per week. The post holder may be required to work flexible hours, where necessary, to meet the demands of the post. Time off in lieu will be given.
- In addition to public and privilege holidays, which total 10 days, the post holder will be entitled to 20 days annual leave.
- Starting salary £28,000
- The Community Forest Manager will use his or her car for work related journeys. It is the responsibility of the post holder to ensure that their insurance covers them for this purpose. A mileage allowance based on Inland Revenue recommended mileage rates will be payable monthly in arrears. This will not be payable for the journey to and from work.

Carsphairn Community Woodland has an equal opportunities policy to ensure all members of staff employed by CCW and all applicants for employment will be given equal opportunity irrespective of sex, marital status, race, colour, nationality or ethnic origin, in all aspects of recruitment, employment, promotion and training. CCW is committed to giving full and fair consideration to people with disabilities applying for this post who possess the relevant skills and experience.

This post is part funded by the Scottish Land Fund.

## Appendix 5 Carsphairn Household Firewood Survey

Carsphairn Community is investigating the community purchase of Muirdrochwood. One of the ideas we have for the future management of the forest is to establish a firewood business so we are surveying local householders to identify the likely level of demand.

Please only complete one form per household then return your completed questionnaire to the place you collected the form or email to [carsphairncw@gmail.com](mailto:carsphairncw@gmail.com) by 25th May

### 1. Do you burn firewood in your home? Yes / No

If you answered Yes - skip to question 3. If No - go to question 2

### 2. We would like to find out why you do not burn wood as a fuel

Please select all that apply and then go to question 14

- My home does not have a chimney / chimney is blocked up
- Burning wood creates a lot of mess and smell /is too much effort
- Firewood is difficult to source and/or expensive
- There is nowhere to store it
- Other reason (please specify).....

.....

### 3. For people who burn wood: How do you burn it? Please tick all that apply

- Wood stove
- Kitchen range
- Open fire
- Log boiler
- Other (please specify)

.....

### 4. How do you heat your home?

Please provide a percentage estimate for each fuel over a typical year

Woodfuel .....%

Oil .....%

Gas .....%

Coal .....%

Electric .....%

Other.....%

### 5. When do you burn wood? (Tick all applicable)

- Spring
- Summer
- Autumn
- Winter

**6. Where do you source your wood? (tick all applicable)**

- Buy it cut and split
- Buy it as green wood for processing myself
- Grow and process it myself
- Scavenge it
- Waste wood
- Other (please specify):

**7. Do you have any preferences?**

- Hardwood
- Softwood
- No preference

**8. How much do you use in a year? Please give an estimate of quantity and cost based on the units in which you acquire or buy wood**

- Cubic metre
- Tonne
- Pick-up load
- Builders bag
- Other

**9. If you would like to get more of your heat from wood please state what currently stops you burning more wood:**

- N/A
- Difficult to find local wood to buy
- Difficult to find seasoned wood to buy
- Difficult to find 'free' or 'scavenged' wood
- Shortage of storage at home
- Wood is too expensive
- Other (please specify)

**10. Please indicate whether you would consider buying Firewood from Carsphairn Community Woodland and add any other comments here.**

.....  
.....

Please return the completed form to the shop or email to [carsphairncw@gmail.com](mailto:carsphairncw@gmail.com) by 25th May

Thank You!

Carsphairn Community Woodland Ltd.